Supplement to Staff Assessment

LOS ESTEROS CRITICAL ENERGY FACILITY

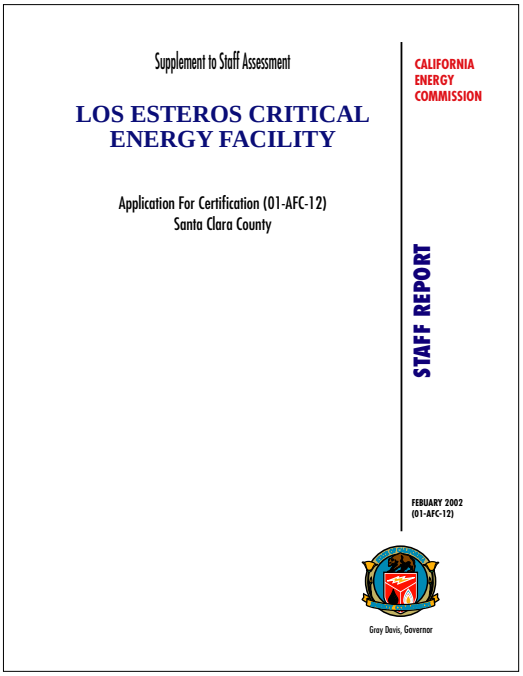
Application For Certification (01-AFC-12)
Santa Clara County

CALIFORNIA ENERGY COMMISSION

STAFF REPORT

FEBUARY 2002
(01-AFC-12)

Gray Davis, Governor



CALIFORNIA ENERGY COMMISSION

SITING OFFICE

Robert Worl
Project Manager

Roger E. Johnson
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SYSTEMS ASSESSMENT & FACILITIES SITING DIVISION

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NOTE TO READER

This report is a Supplement to the Staff Assessment (SA) filed on December 31, 2001. This Supplement includes errata, changes to staff's analysis based upon information received after the SA was written, and information received as a result of the SA workshop held on January 14, 2002. Some written comments were received after that date, and to the extent possible, these are incorporated into this Supplement.

The Supplement to the SA includes changes to the following sections:

- Response to Public and Agency comments,
- Executive Summary (Section Replaced)
- Project Description,
- Air Quality,
- Biological Resources, (Section Replaced)
- Cultural Resources,
- Hazardous Materials,
- Noise and Vibration,
- Socioeconomics,
- Soils and Water,
- Traffic and Transportation,
- Transmission Line Safety and Nuisance,
- Visual Plume (Analysis Added)
- Visual Resources,
- Worker Safety and Health,
- Facility Design,
- Waste Management,
- Alternatives,
- General Conditions (Replaces Compliance Section)

Errata, clarifications, and questions are addressed within each technical area listed above. Staff has made an effort to address all written comments and material received from the applicant and others through January 28, 2002.

TABLE OF CONTENTS

LOS ESTEROS CRITICAL ENERGY FACILITY
SUPPLEMENT TO STAFF ASSESSMENT
(01-AFC-12)

[1] No supplement for this subject area.

EXECUTIVE SUMMARY

This Executive Summary replaces the Executive Summary from the Staff Assessment filed December 31, 2001.

INTRODUCTION

This supplement to the Staff Assessment (SA), together with the SA published December 31, 2001, contains the Energy Commission staff's independent analysis of Los Esteros Critical Energy Facility Project (LECEF) Application for Certification (AFC) (01-AFC-12). The LECEF and related facilities such as the electric transmission lines, natural gas line, water supply lines and wastewater lines are under the Energy Commission's jurisdiction (Pub. Resources Code § 25500). When issuing a license, the Energy Commission acts as lead state agency (Pub. Resource Code § 25519(c)) under the California Environmental Quality Act (Pub. Resource Code §§ 21000 et seq.), and its process is functionally equivalent to the preparation of an environmental impact report (Cal. Code Regs, tit. 14 § 15251(k)).

It is the responsibility of the Energy Commission staff to complete an independent assessment of the project's potential effects on the environment, the public's health and safety, and whether the project conforms with all applicable laws, ordinances, regulations and standards (LORS). The staff also recommends measures to mitigate potential significant adverse environmental effects and conditions for construction, operation and eventual closure of the project, if approved by the Energy Commission. The analyses contained in this document were prepared in accordance with Public Resources Code section 25500 et seq.; the California Code of Regulations, Title 20, section 12001 et seq.; and the California Environmental Quality Act (Pub. Resources Code § 21000 et seq.) and its guidelines (Cal. Code Regs., tit. 14 § 15000 et seq.).

This SA is not the decision document for these proceedings nor does it contain findings of the Energy Commission related to environmental impacts or the project's compliance with local/state/federal legal requirements. The final decision will be made by the Commissioners of the California Energy Commission only after the completion of evidentiary hearings. The Commissioners will consider the recommendations of all interested parties, including those of the Energy Commission staff; the applicant; intervenors; concerned citizens; and local, state, and federal agencies, before making a final decision on the application to construct and operate the LECEF.

BACKGROUND

On August 7, 2001, Calpine c*Power, filed an Application for Certification (AFC) for the Los Esteros Critical Energy Facility (LECEF). The AFC was found to be complete by the California Energy Commission on September 25, 2001. Calpine plans to have the project constructed and online for the summer of 2002. The project is proposed as mitigation for the U.S. DataPort (USDP) Planned Development Zoning Project (PDZ) approved by the City of San Jose at a City Council Meeting on April 3, 2001. The U.S.

DataPort Project included four dual-fuel-fired 10 MW turbines and approximately 90 two-MW diesel back up generators for emergency power generation. The City of San Jose requested that the applicant develop a more efficient, modern, and less polluting energy facility instead of the diesel generators. The Los Esteros Critical Energy Facility is the result of that effort.

Public Resources Code, section 25552, requires the Energy Commission issue its final decision on an application within four months, or at any later time mutually agreed upon by the Energy Commission and the applicant, for simple-cycle projects like LECEF that can come online by December 31, 2002. The Energy Commission staff has proposed that this permitting process be completed in the 4-month review process. On November 15, 2001 the Committee adopted a schedule which, with agreement from the applicant, will be completed in approximately 140 days subject to the completion of certain tasks by the staff, applicant, the air district and the City of San Jose. Certain of these tasks are beyond the control of the staff and applicant and may cause the addition of a number of days to the schedule.

The information and analyses contained in this supplement focuses primarily upon new information, clarifications from the applicant and others, and staff responses to comments received in writing and at the SA workshop held January 14, 2002.

PROJECT DESCRIPTION

Calpine c*Power is proposing to construct and operate the Los Esteros Critical Energy Facility (LECEF). The site is located near the intersection of State Route 237 and Zanker Road, at 1515 Alviso-Milpitas Road, in the City of San Jose, Santa Clara County, California. LECEF will be a nominally 180 megawatt (MW) simple-cycle power plant. The proposed facility will include four combustion turbine generators (CTGs) equipped with water injection and spray intercooling injection (SPRINT) to control oxides of nitrogen (NOx) emissions and associated support equipment. The power plant area will be accessed via an access road from Zanker Road. The power plant will consist of four GE gas turbines (LM6000 - PC Sprint) with chillers, fuel gas compression facilities, power generators, selective catalytic reduction (SCR) for emission control, and associated instrumentation, piping, and wiring. The produced power will eventually be conveyed through underground cables to the new Los Esteros Substation to be built by PG&E adjacent to the LECEF and USDP project site. A temporary connection will be via a 2000-foot line interconnecting with an existing 115 kV line at Zanker Road. A more complete description of the project is contained in the **PROJECT DESCRIPTION** section of the SA.

PUBLIC AND AGENCY COORDINATION

In preparing the supplement and the SA, Energy Commission staff conducted one publicly noticed workshop in mid-November, 2001 prior to release of the Staff Assessment on December 31, 2001. A second publicly noticed workshop on the completed SA was held on January 14, 2002. These workshops explained the Energy

Commission's process and provided interested parties an opportunity to air their questions and concerns about the proposed power plant.

Staff also coordinated with relevant local, state and federal agencies, such as the California Independent System Operator, Bay Area Air Quality Management District, U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game, and the City of San Jose, the Alviso community and the Santa Clara Valley Water District. This SA and the Supplement provides agencies and the public the opportunity to review the Energy Commission staff's analysis of the proposed project.

In addition to the community and agency coordination efforts were made to insure that the public was widely informed regarding opportunities to participate. Site visits, informational hearings and workshops were advertised in local and regional newspapers, including insertion of 5,000 bilingual (Spanish-English) flyers, and notices sent home with children of local schools.

Written comments received from members of the public, and letters from agencies that require some form of response, have been included in the Staff Assessment, with additional received comments included in the Supplement.

STAFF'S ASSESSMENT

Each technical area section of the SA contains a discussion of impacts, and where appropriate, mitigation measures and conditions of certification. The SA includes staff's assessments of:

- the environmental setting of the proposal;
- impacts on public health and safety, and measures proposed to mitigate these impacts;
- environmental impacts, and measures proposed to mitigate these impacts;
- the engineering design of the proposed facility, and engineering measures proposed to ensure the project can be constructed and operated safely and reliably;
- project closure;
- project alternatives;
- compliance of the project with all applicable laws, ordinances, regulations and standards (LORS) during construction and operation; and
- proposed conditions of certification.

Staff expects that the City of San Jose will complete its planned rezone of the project site by February 19, 2002. This action is required for the project to comply with City of San Jose zoning requirements.

ENVIRONMENTAL JUSTICE SUMMARY

In the **SOCIOECONOMICS** section of the Staff Assessment staff presents the results of its "environmental justice screening analysis." The purpose of the environmental justice analysis is to determine whether or not there is a low-income and/or minority population within the potential affected area of the proposed site.

SOCIOECONOMICS Figure 1 identifies census blocks within six-miles of the proposed project that have minority populations greater than 50 percent. Census 2000 data indicate that the minority population within the six-mile radius of the project site is 69 percent. The percent of population considered low-income or living below the poverty level is less than nine percent within a six-mile radius of the LECEF. Since there is a greater than 50 percent minority population, staff completed a focused Environmental Justice assessment.

Environmental Justice issues were examined in ten technical areas: air quality, public health, visual resources, noise, hazardous material handling, transmission line safety and nuisance, land use, water, waste disposal, and traffic and transportation. Each of these areas found no unmitigated significant impacts, and therefore no disproportionate environmental justice impacts associated with the LECEF.

SUMMARY OF STAFF'S CONCLUSIONS

With the mitigation measures proposed in the conditions of certification in the Staff Assessment and changes or additions from the Supplement, staff believes that the project's potential adverse environmental impacts would be reduced to levels of less than significant in all areas.

Staff also believes that if these proposed conditions of certification are adopted, the project would conform to all federal, state, and local laws and ordinances, except for land use zoning. However, the City of San Jose's planned change in zoning would bring the project into conformance. This action is to be decided by February 19, 2002.

Below is a summary of potential adverse environmental impacts and LORS compliance for each technical area.

Technical Discipline	Environmental / System Impact	LORS Conformance
Air Quality	Impacts mitigated	Yes
Biological Resources	Impacts mitigated	Yes-with avoidance
Cultural Resources	Impacts mitigated	Yes
Power Plant Efficiency	Impacts mitigated	Yes
Power Plant Reliability	No impacts	N/A
Facility Design	No impacts	Yes
Geology	Impacts mitigated	Yes
Hazardous Materials	Impacts mitigated	Yes
Land Use	Impacts mitigated	Yes, when City rezone action is completed
Noise	Impacts mitigated	Yes
Public Health	Impacts mitigated	Yes
Socioeconomics	No impacts	Yes
Traffic and Transportation	Impacts mitigated	Yes
Transmission Line Safety	Impacts mitigated	Yes
Transmission System Engineering	Impacts mitigated	Yes
Visual Resources	Impacts mitigated	Yes
Waste Management	Impacts mitigated	Yes
Water and Soils	Impacts mitigated	Yes
Worker Safety	Impacts mitigated	Yes

The following summarizes staff's position with respect to Biological Resources and Land Use:

Biological Resources

After analyzing information provided by the applicant during this Staff Assessment process, and with the mitigation measures proposed in the conditions of certification in the Staff Assessment and Supplement, staff believes that the project's potential adverse biological resource impacts would be reduced to levels of less than significant.

Regarding LORS compliance and potential environmental impacts, the applicant and staff have discussed the project with USFWS. Based on preliminary information, the USFWS indicated that consultation may be necessary for the bay checkerspot butterfly and other serpentine endemics under the Endangered Species Act. However, their conclusion was made prior to the completion of this Staff Assessment and Supplement and the recommended conditions of certification that we believe mitigate the project's biological impacts. The applicant believes that the impacts of the project on these biological resources are immeasurable and they do not intend to enter formal consultation with the USFWS.

Staff concludes that the project avoids impacts to the bay checkerspot butterfly and other serpentine endemics by using Best Available Control Technology (BACT) to limit air emissions (NO_x deposition on serpentine habitats) and will require that the applicant secure air quality offsets for incremental emissions. Staff believes this avoids impacts

to the biological resources in question. Furthermore, staff proposed 17 conditions of certification for Biological Resources. One of which requires Calpine to purchase and set aside 40-acres of high-grade habitat to be managed in perpetuity for the improvement of the species. With these measures, staff believes the project meets federal, state and local laws and ordinances and avoids harm to sensitive and listed species in question.

Land Use

The project does not currently comply with City of San Jose zoning requirements. However, if the city approves Calpine c*Power's request to rezone the site, the project would be in conformance with local laws and ordinances. The City plans to use the Staff Assessment as its environmental documentation for their decision. The City of San Jose has expressed its intent to complete the PDZ rezone requested by Calpine c*Power by February 19, 2002.

CONCLUSIONS AND RECOMMENDATIONS

In summary, staff concludes that with the proposed mitigation, and positive action by the San Jose City Council on the application for rezoning, the project would be in conformance with all Laws, Ordinances, Regulations, and Standards (LORS) and would avoid significant environmental and system impacts. Staff recommends that, if the project is approved, the proposed conditions of certification contained in each technical area in the Staff Assessment and the Supplement, should be adopted to ensure that all potential impacts for both construction and operation are mitigated to the extent possible.

RESPONSE TO AGENCY AND PUBLIC COMMENTS

Staff has responded to all written comments received on the Staff Assessment. These comments were received from the public agencies and intervenors listed below. Comments in general were provided by technical section/chapter. Responses appear in the appropriate chapters under the heading "Response to Public and Agency Comments." Comments addressed in more than one technical section are listed below. Copies of the public agency and intervenor comment letters are included at the end of this section.

AGENCY COMMENTS

CITY OF SAN JOSE

On January 12, 2002, staff received an initial letter from the City of San Jose with comments on the Staff Assessment. These comments are addressed in the **PROJECT DESCRIPTION, AIR QUALITY, BIOLOGICAL RESOURCES, HAZARDOUS MATERIALS, NOISE, SOIL AND WATER RESOURCES, VISUAL RESOURCES, WASTE MANAGEMENT, AND ALTERNATIVES** sections of this supplement.

On January 17, 2002, staff received a letter from the City of San Jose with a list of additional comments on the Staff Assessment. These comments are addressed in the **LAND USE** and **NOISE** sections of this supplement. *(Questions from these letters, addressed in this supplement, are designated as **SJ-**).*

SJ-29 (See BIOLOGICAL RESOURCES)
SJ-31 (See BIOLOGICAL RESOURCES and VISUAL RESOURCES)
SJ-32 (See NOISE AND VIBRATION and VISUAL RESOURCES)
SJ-50 (See LAND USE and VISUAL RESOURCES)

CITY OF MILPITAS

On January 12, 2002, staff received comments from the City of Milpitas on the Staff Assessment. The City of Milpitas is an Intervenor in this siting case. These comments are addressed in the **AIR QUALITY, BIOLOGICAL RESOURCES, HAZARDOUS MATERIALS, LAND USE, NOISE, PUBLIC HEALTH, SOCIOECONOMICS, SOIL AND WATER RESOURCES, VISUAL RESOURCES, WORKER SAFETY AND FIRE PROTECTION, AND ALTERNATIVES** sections of this supplement. *(Questions from the City of Milpitas addressed in this supplement are designated as **MIL-**)*.

SAN JOSE FIRE DEPARTMENT

On January 29, 2002, staff received a letter from the San Jose Fire Department with comments on the Staff Assessment. These comments are addressed in the **HAZARDOUS MATERIALS and WORKER SAFETY AND FIRE PROTECTION**

sections of this supplement. *(Questions from the San Jose Fire Department addressed in this supplement are designated as **SJFD-**)*

PACIFIC GAS AND ELECTRIC COMPANY

On January 16, 2002, staff received a letter from Pacific Gas and Electric Company submitting comments on the Staff Assessment. These comments are addressed in the **SOIL AND WATER RESOURCES** and **VISUAL RESOURCES** sections of this supplement. *(Questions from Pacific Gas and Electric Company addressed in this supplement are desgnated as **PG&E-**).*

PG&E-3 (See SOIL AND WATER RESOURCES and VISUAL RESOURCES)

January 12, 2002

Robert Worl
Energy Commission Project Manager
Attn: Docket No. 01-AFC-12
1516 Ninth Street
Sacramento, CA 95814-5512

RE: Comments regarding the Staff Assessment prepared by the California Energy Commission for the Los Esteros Critical Energy Facility (Docket No. 01-AFC-12)

Dear Mr. Worl:

Thank you for the opportunity to provide comments regarding the Staff Assessment and participate in the California Energy Commission's Power Plant Siting and Certification process. The City of San Jose will play an integral part in processing all permits for the Los Esteros Critical Energy Facility and adjacent US Dataport projects. The Planned Development rezoning for both projects are scheduled to be heard by the City Council in the near future. As noted in earlier communication, the City plans to use the California Energy Commission's Staff Assessment to satisfy the required California Environmental Quality Act (CEQA) documentation in hearing the Los Esteros project. Thus, the City is very interested in ensuring that the Staff Assessment is both comprehensive and legally sound in serving as the City's CEQA equivalent document. We are still in the process of reviewing the Staff Assessment and preparing a final set of comments, however, please accept the initial comments listed below.

PROJECT DESCRIPTION

On Page 3-2, second paragraph, third sentence needs to be corrected to state that the Cilker farm is located to the east of the project, not west.

Page 3-5, Peak water consumption is noted here as 566 gallons per minute but 4.9-7 cites it as 536 gpm.

The project description needs to describe the inclusion of the Emergency Generator and Fire Pump Engine on the project and their intended use.

Facility Closure – According to Public Resources Code 25552 and Condition of Certification EFF-1, the project will be required to close within three years or convert to a combined cycle plant. These requirements place legally binding commitments on the project, forcing conversion into a larger powerplant or undergo termination. As stated within our opening paragraph, the City intends to use the Staff Assessment as the CEQA equivalent document in our land use entitlement process. CEQA is specific about

defining the scope of a "project" and evaluating all foreseeable impacts associated with it. The process of "segmenting", or dividing projects into small parts to avoid full disclosure of environmental impacts is not allowed, per CEQA case law (Bozung vs. Local Agency Formation Commission (1975)). As stated, the project will be required to become a combined cycle power plant within three years to make the project feasible. However, the project reviewed within the Staff Assessment only evaluates the environmental impacts of the 180 MW simple cycle powerplant. How are the Staff Assessment and the California Energy Commission able to address issues regarding "segmenting" per CEQA given this situation?

Figure 2 needs to show the alignment of the Bay trail, transecting from east to west on the northern border of US Dataport.

In the References section, the City prepared an Environmental Impact *Report*, not *Statement*, for the US Dataport project.

AIR QUALITY

Need further clarification linking the Tables 8 and 9 showing how the total pounds per day of emissions in Table 8 equates to the tons per year shown in table 9.

The Air Quality Section needs to clearly list the Thresholds of Significance to be used (quantitative & qualitative) before making assessments and conclusions regarding impacts.

Future clarification is needed regarding the data shown in Table 13. Does this conclude that the modeled impact from the Diesel Pump and emergency generator will be over 210 ug/m^3 NO_2? Also please provide further clarification regarding the data listed in the Cumulative Impacts (Table 14) regarding NO_2. Does this conclude that NO_2 impacts from other projects will be 9 ug/m3 NO_2?

Please list the sources for the project listed within the Cumulative Projects evaluation, including their location, size, and rationale for inclusion within the analysis.

Given the high levels of emissions anticipated from construction activity, mitigation should include all "Control Measures" listed by BAAQMD as found within their CEQA Guidelines.

On page 4.1-22, first paragraph, further clarification is needed regarding the conclusions listed here. How does the statement that there will be an increase by 0.2 ug/m^3 due to cumulative impacts relate to the 225.2 ug/m^3 NO_2 impacts in Table 13 and 234.3 ug/m^3 impacts in Table 14.

Description of PM10 Mitigation needs to more closely analyze and conclude if the mitigation will reduce the identified significant impacts. When mitigating significant impacts, there needs to be a direct nexus between the mitigation and impacts, showing

how the mitigation will measurably reduce impacts to a less than significant level. As worded and proposed, the mitigation listed is speculative and does not specify how it will be implemented and directly reduce the identified air quality impacts.

Generally, mitigation that includes the phrases “to the maximum extent possible” and “at the earliest feasible opportunity” should be avoided, as it does not adequately enforce the mitigation proposed (pg. 4.1-35 – AQ1&2).

BIOTICS

On page 4.2-9, “Communication Hills” in the first paragraph should be corrected to state “Communications Hill.”

Discussion of Critical Habitat for listed species also needs a brief description of the Critical Habitat designated for the Steelhead Trout, encompassing drainages into San Francisco Bay. This would include Coyote Creek, located west of the project.

On page 4.2-11, description of the storm drain outfall to be constructed in Coyote Creek is incomplete. More detail is needed, including maps and other graphics, showing what specific habitats, wildlife & vegetative species are likely to be found here, the specific alignment of the project and its anticipated impacts.

On the same page, the discussion states that several bird species from the Wildlife Refuge may use the project site for foraging. What are these?

On page 4.2-13, discussion of the storm drain outfall to be constructed states that .005 acres (approximately 218 square feet) of riparian will be removed. What mitigation is proposed for the removal of this habitat?

On page 4.2-18, in the third paragraph, discussion of Burrowing Owls needs to clearly state if the area described can be classified as Burrowing Owl habitat, and then elaborate on its qualities as nesting and foraging habitat.

The use of “should” is not adequate in describing the need for surveys and their submittal to CDFG (pg. 4.2-18, first paragraph).

Again, description of impacts and mitigation for the stormwater outfall is vague. The description needs to specifically detail what riparian vegetation will be impacted, the number of trees removed, if any, the special status species that would likely be affected, and erosion & sedimentation impacts to Coyote Creek.

On page 4.2-22, the City’s Riparian Corridor Policy states that mechanical equipment should not exceed noise levels for open space as specified in the Noise Element of the General Plan. The noise standard for Open Space is actually 75 DNL. This should be corrected (third paragraph). However, as is section of Coyote Creek is designated Public Parks and Open Space, the 60 DNL level would be applicable.

As stated earlier, analysis of impacts related to the stormwater outfall is inadequate. The paragraph at the top of 4.2-24 states that plans have not yet been developed and a final analysis of impacts is not complete. As the City intends to use the SA as a CEQA equivalent document for the project, this lack of information, required as part of the CEQA process, is unacceptable. The SA needs to disclose all potential impacts to the decisionmakers before they are able to take action on the project.

On page 4.2-27, second paragraph, it is stated that construction of LECEF would result in a permanent removal of 13.5 acres of habitat. In discussing mitigation for this habitat, the SA needs to more clearly state how this will be accomplished. Several options are listed as available, that "should" be implemented (4.2-33) but no specific plan on how this will be accomplished. The conditions of certification included (BIO-11) are vague in description, again use "should", and do not detail how mitigation for habitat impacts will be implemented. In addition, the SA needs to clearly conclude if implementation of the project would result in both project specific and cumulative significant impacts (4.2-40 first paragraph), after mitigation.

The table on page 4.2-29 needs to be corrected to show that the emergency generator is natural gas, not diesel.

On page 4.2-35, what specific CEQA document will be used by CDFG for the Streambed Alteration Agreement?

HAZARDOUS MATERIALS

This project is located within the Water Pollution Control Plant's emergency planning zone based on a computer model, worst-case scenario of hazardous materials used at the Plant. Discussion of the model results, and other issues related to safety and chemical releases at the Water Pollution Control Plant can be found in the Plant's Risk Management Plan (RMP). Questions about possible releases and the RMP can also be addressed by Plant staff at 408-945-5300.

NOISE

Page 4.6-4 – 5. The City's Zoning Ordinance states that uses will be not allowed on commercial, agricultural, and industrial zoned parcels that exceed the listed thresholds (55 dBA residential, 60 dBA commercial, 70 dBA industrial) without a conditional use permit. Thus, these thresholds are not maximum noise levels allowed, except in residential zones.

As stated in the Biotics section, the noise thresholds in the riparian corridor policy are 75 DNL (and background noise), not 60 DNL. (Page 4.6-13, second paragraph).

Graphics showing noise impacts and contours from the project (as used in the US Dataport FEIR, pg. 111-112) would be preferred in illustrating the analysis and conclusions.

SOILS AND WATER RESOURCES

Page 4.9-4, siting development near the SJ/SC WPCP exposes the development population to potential odors from the Plant (as well as the neighboring landfill). While such exposure is regarded as a nuisance rather than a health hazard, the potential remains for it to bring restrictions on Plant operations, e.g., replacement or relocation of the sludge-drying beds. Measures should be taken to minimize such exposure. Low density occupancy buildings should be located to the north, with more occupied buildings as far south as possible. HVAC systems should be designed to filter odors. And landscaping should include tree barriers for odor dispersion.

Page 4.9-11, The SA indicates that interruptions in recycled water service will be addressed with a 24 hour supply from onsite storage. As noted in our comments dated December 11, 2002, recycled water may experience interruptions of **up to 72 hours**; any backup system should account for 72 hours of supply.

VISUAL RESOURCES

Page 4.12-6, first sentence, “east” corrected to read “west” in describing KOP2.

Discussion of cooling tower plumes states that visible plumes would occur 16 percent of all daylight hours and 22 percent of al seasonal daylight hours. It would be difficult to describe this as a “low frequency of plume occurrence.” In view of the conditions of certification required for the Metcalf Power Plant, a conclusion here that plumes would not have any visual impacts, when substantially greater than those at Metcalf, is not satisfactory. Given the high visibility of the project, the Staff Assessment needs to demonstrate that the Best Available technology is required and incorporated into the project to substantially reduce plume visibility.

On page 4.12-12, third paragraph, discussion hastily concludes that the project would not have a significant visual impact because SR 237 is not a state-designated route. SR 237 is designated as an Urban Throughway under the Scenic Routes and Trails diagram within the City’s General Plan. Any negative impact to views from Urban Throughways could be considered significant.

Overall, discussion of mitigation and conclusions related to Visual Resources is speculative and unsubstantiated. The project will include cooling towers of up to 90 feet in height with expected visual plumes up to 128 feet in height. As mitigation for any visual impacts, the SA recommends a landscaping plan which will screen the project and reduce significant impacts (VIS-3). Figure 6 presents a view of the project with landscaping after 5 years. Given the low level of screening provided in this figure and the

lack of specificity in VIS-3, the SA has not effectively demonstrated how identified significant visual impacts will be mitigated to a less than significant level.

Condition of Certification VIS-3 states that landscaping shall be provided surrounding the project. The landscaping plan included in Figure 16 only includes landscaping for the southern and western borders of the project.

Many of the policies from the Alviso Master Plan evaluated for consistency analysis should be discussed within the Land Use section of the SA rather than here.

WASTE MANAGEMENT

Page 4.13-7, There are 23 franchised haulers, not 11 as indicated

ALTERNATIVES

Page 5.6-4, second to last bullet should read “Edenvale” not “Avendale” Redevelopment Area.

The Map on 5.6-5 is missing.

Discussion of the Edenvale alternative should discuss any expected increase or decrease in Biotics Impacts (related to Burrowing Owls, Serpentine Soils), possible General Plan conflicts regarding height restrictions, and if this alternatives would accomplish any or all of the projects objectives / goals.

For discussion of Cilker / WPCP property, it is not clear what Air Quality advantages would exist. In addition, the discussion should evaluate this alternative would affect identified visual resources impacts.

Again, thank you for the opportunity to participate in the Power Plant siting process and provide comments on the Staff Assessment. The City looks forward to work with the CEC in the land use entitlement process for the Los Esteros Critical Energy Facility and ensure that the Staff Assessment serve as a CEQA adequate document for both the City and the California Energy Commission.

If there are any questions regarding any of the above, please do not hesitate to contact myself at (408) 277-4576.

Sincerely,

Rob Eastwood
Planner II, City of San Jose.

January 17, 2002

Robert Worl
Energy Commission Project Manager
Attn: Docket No. 01-AFC-12
1516 Ninth Street
Sacramento, CA 95814-5512

RE: Comments regarding the Staff Assessment prepared by the California Energy Commission for the Los Esteros Critical Energy Facility (Docket No. 01-AFC-12)

Dear Mr. Worl:

Please find below a list of comments on the Staff Assessment that we were unable to include in our initial letter, given time constraints. This will conclude our formal comments on the Staff Assessment that was received and we look forward to receiving the revised document (Addendum).

LAND USE

Page 4.5-3 Land Use Table 1
Tree Removal Controls.
Need to add that trees that are designated Heritage Trees are also protected per San Jose Municipal Ordinance Title 13

Any tree as the term "tree" is defined in. Section 13.28.010K located on private property which, because of factors including but not limited to its history, girth, height, species or unique quality, has been found by the city council to have a special significance to the community shall be designated a heritage tree. Such trees shall be placed on a heritage tree list which shall be adopted by the city council by resolution, which resolution may be amended from time to time to add to or delete certain trees therefrom.

Any person who unlawfully vandalizes, grievously mutilates, removes or destroys such a heritage tree shall incur a civil penalty in the amount of five thousand dollars per heritage tree thus vandalized, mutilated, removed or destroyed, the collection of which shall be enforced by civil action brought in the name of the city by the city attorney.

Page 4.5-6. Project Location
WPCP should be spelled out and explained in each section.

Page 4.5-7 Linear Facilities
PG&E substation information should be updated.

Page 4.5-8 Surrounding Land Use, Page 4.5-14 Sensitive Receptors, Page 4.5-16 Discussion of Impacts

Discussion on Cilker property. More analysis should be done on the impacts on the Cilker property since it is the closest sensitive receptor. Dataport has extended an option to purchase the property. So there is a chance that Dataport may not purchase the property. Although it is likely it will be replaced with industrial uses, some discussion needs to be included to explain why there would be no significant impact even if it were to stay.

Page 4.5-9. Surrounding Zoning Designations.
The zoning designations need to be updated. Industrial Park should be IP, not MP. M-4 is now HI or heavy industrial. General Commercial C-2 should now be CG. Manufacturing M-1 should be LI light industrial.

Page 4.5-18 Conflict with any applicable LORS
"effectuation of the site's rezone should be revised to read "the City's implementation of the site's rezoning.

Page 4.5-18 Community Character Policies.
This section should discuss policy 1 and policy 2 to explain consistency. Section could be written to say that the site design and landscaping will create a project that will be consistent with the zoning and general development of area.

Page 4.5-19. Height Restrictions
The GP amendment has been changed for this site and is not dependent upon the development of Dataport.

Page 4.5-20
Add language that explains adverse impacts are not considered significant.

Include short description of what Cond. Of Certif. Are recommended to reduce impacts on visual resources.

NOISE

If the applicant intends to modify the construction hours listed in the conditions of certification, these need to be disclosed and analyzed within this document. As the City intends to use the SA as the CEQA document for the project, any new noise impacts that were not evaluated within would constitute new impacts and subsequent CEQA analysis.

If there are any questions regarding any of the above, please do not hesitate to contact myself at (408) 277-4576.

Sincerely,

Rob Eastwood
Planner II, City of San Jose.

MILPITAS'S COMMENTS ON THE STAFF ASSESSMENT
OF THE LOS ESTEROS CRITICAL ENERGY FACILITY

INTRODUCTION

The LECEF is approximately 1200 feet from the City of Milpitas's western boundary. The City of Milpitas is opposed to Calpine's LECEF project because of the impacts (environmental and otherwise) that the project would have on the City's residents, businesses, and property owners. Among other reasons for its opposition, Milpitas is deeply concerned that this project, couched as a mitigation measure to a U.S. DataPort project *that may never be built*, will attract still other undesirable uses adjacent to its western boundary, which is already the site of a landfill and a regional water treatment facility.

Unfortunately, since the City has had only approximately a week to review the nearly 800 page Staff Assessment ("SA"), our comments are necessarily preliminary. We are hopeful that the workshop on January 14 will be educational and will result in additional comments from the City to assist the CEC staff in preparing the Addendum. Of course, we reserve the right to raise other issues at a later date. What follows are the City's preliminary comments broken down in the various issue areas evaluated by the commission. Please let us know if we can answer any questions.

AIR QUALITY:

The City has not yet had an opportunity to complete a thorough review of the air quality section. We are hopeful that the presentation at the workshop will explain the air quality impacts of the LECEF on the residents, students, businesses, and workers in the City of Milpitas.

BIOLOGICAL RESOURCES:

The analysis of the impacts of the project relies on the presence of the U.S. DataPort project. As is developed in additional detail in the visual resources section of the City's comments, it is not proper, because the U.S. DataPort project will not necessarily be built, to rely on its presence to analyze the impacts of *this* project. For instance, in relation to bird collisions/deaths, the report states that the US DataPort buildings will discourage birds from flying into the power plant site. In relation to noise and particularly light, the assessment states that there will be direct and indirect impacts on biological resources from noise and light. However, the SA considers the presence of the U.S. DataPort buildings in analyzing this impact.

HAZARDOUS MATERIALS:

City staff was unable to complete its review of the hazardous materials section. We anticipate providing written comments at or prior to the workshop.

LAND USE:

1) City of San Jose General Plan

San Jose General Plan, *Urban Design Policy 7* states that the City should encourage undergrounding existing overhead distribution lines, except in the case of light rail transit vehicles and high-tension electrical transmission lines. The project is proposing overhead lines, but it is not clear whether this transmission line is of the high-tension variety.

Under the City of San Jose General Plan, *Scenic Routes and Trails Diagram*, the policies state that new development adjacent to trails and pathways corridors, such as the trails along both side of Coyote Creek, should not compromise safe trail access nor detract from the scenic and aesthetic qualities of the corridor. (See Land Use Table 1.) This policy is not adequately analyzed. The LECEF project, by detracting from the natural riparian experience along Coyote Creek, seems in opposition to this policy.

The discussion at page 4.5-11 should note that the trail alignment along the east side of Coyote Creek (in Milpitas) serves as both the Bay Trail and Juan Bautista de Anza National Historic Trail. Furthermore, the discussion incorrectly notes that the Bay Trail project is not yet funded. The City of Milpitas has prepared an alignment for the segment of the Bay Trail along the eastern side of Coyote Creek, received a grant from the Association of Bay Area Governments, and is currently proceeding with the design phase of the project. Construction is scheduled to begin in the fall of 2002. Obviously, this trail segment is of local, regional, statewide, and national importance, and the SA should thoroughly analyze the impacts of the LECEF on the trail.

2) Alviso Master Plan

Community Character Policy 2 states that new developments should have architectural and landscaping qualities that maintain the "seaside" qualities of Alviso. The power plant will not have architectural elements that will have "seaside" qualities. It will look like an industrial and utilitarian facility. The Addendum should include an analysis of this policy.

In relation to Lands Outside of the Village Area Design Objective, the high-visibility project will not be attractive and is questionable whether it will fit in the context of the larger community.

Light Industrial areas in the Alviso Master Plan allow a wide variety of industrial uses *EXCEPT or EXCLUDING* any uses with unmitigated hazardous or nuisance effects. It is not clear that the project will not have any unmitigated nuisance effects (visual, biological).

A General Plan amendment was required for the DataPort project (for heights above 100 feet); however, as mentioned in the SA, it is not clear if the amendment applies to the LECEF project. Has there been a determination whether the amendment does apply to the LECEF facility and if it does not apply, what will then be required?

3) LORS Consistency

It is notable that the SA relies on the City of San Jose's *future* approval of the rezoning of the project for a consistency finding. (SA, p. 4.5-18.) The CEC is required to make an independent finding of consistency with LORS. Rather than relying on San Jose, the SA should include a determination that the project complies with each of the general plan policies listed in Land Use Table 1.

4) Agricultural Land Conversion

The SA notes that, although the land to be developed for the LECEF is currently shown on state maps as prime agricultural land, the Director of the Department of Conservation has determined that the land should be removed from the maps because of inactivity. Does the letter from the DOC represent the DOC's final action to reclassify the site?

NOISE AND VIBRATION

It is not clear from the text whether the noise studies performed by the applicant were conducted as though the U.S. DataPort buildings were present or not. As discussed below, it is not proper to analyze the environmental effects of the LECEF by assuming the presence of the U.S. DataPort. It is clear that the studies performed by staff with regard to the Cilker property residences were performed as though the U.S. DataPort were not present. The Addendum should clarify this point. This issue is particularly important, since the increases in noise created by the project appear to bring noise levels right to the City's maximum noise standards. (See SA, p. 4.6-13.)

PUBLIC HEALTH

City staff was unable to complete its review of the public health section. We anticipate providing some written comments at or prior to the workshop. We hope that the presentation at the workshop will satisfy the City that the project will not have a public health impact on the City's students, residents, and workers.

SOCIOECONOMICS

The City has not yet had an opportunity to complete a thorough review of the socioeconomics section. We are hopeful that the presentation at the workshop will assure the City that the project will not have adverse socioeconomic impacts on the residents, students, businesses, and workers in the City of Milpitas.

SOIL AND WATER RESOURCES

Milpitas has not yet had an opportunity to review this section. We hope that the presentation at the workshop will satisfy the City that the project will not have any impacts on Coyote Creek and other regional water resources.

VISUAL RESOURCES

Milpitas is very concerned about the visual impacts of the LECEF on its residents, property owners, and businesses. The following comments seek to encourage a full disclosure of the impacts of the

LECEF on Milpitas's residents, property owners, and businesses.

1) The Analysis of the Visual Impacts of the Project Assuming the Completion of the U.S. DataPort Project is Misleading and Confusing.

Previously, staff had noted that, because the U.S. DataPort project is speculative at the present time, it is not appropriate to consider the visual impacts of the LECEF as though the U.S. DataPort would be built. (See Issues Identification Report (Oct. 18, 2001) p. 5.) Mr. Sedgewick, from U.S. DataPort, generally confirmed the uncertainty at the October 5, 2001 informational hearings. (Transcript of October 5, 2001 Informational Hearing, pp. 50–53.)

For reasons that are unclear to Milpitas, the Staff Assessment nonetheless considers the visual impacts of the LECEF assuming the construction of the U.S. DataPort. It considers the visual impacts of the LECEF from two perspectives: (a) with the completion of the U.S. DataPort project; and (b) without the completion of the U.S. DataPort project. The reasons for doing so are not described. Why has the staff has changed course? Elsewhere in the document, the Staff Assessment now notes, based on a November 2001 conference with Mr. Sedgewick, that construction of Phase 1 of the U.S. DataPort is scheduled to begin in the middle of 2002. Mr. Sedgewick stated at the informational hearing that the project would not go forward without a tenant. At the very least, the Staff Assessment should specify staff's expectation for the completion of the U.S. DataPort.

In performing the environmental review for this project, the Staff Assessment should not consider the potential mitigating impacts of the presence of the U.S. DataPort. As presented to the Commission, Calpine's application has absolutely nothing to do with the U.S. DataPort project. Nothing in the application requires the U.S. DataPort to be built; Calpine does not control the U.S. DataPort property and cannot guarantee that it will ever be completed. Once Calpine receives a license for the facility from the CEC, it will be free to construct the LECEF, whether or not the U.S. DataPort (or some other data center) ever gets built on the site, and Calpine has not offered to make its approval conditional on the completion of the U.S. DataPort project. Furthermore, while the LECEF, with a CEC approval, could be built without the U.S. DataPort, the corollary is not true: because of the City of San Jose's conditions of approval, the U.S. DataPort project could not be constructed without the approval of the LECEF or something similar. Therefore, for environmental review purposes, the CEC must analyze the LECEF as a separate and distinct project from the U.S. DataPort project. To do otherwise would be inconsistent with CEQA's mandate to evaluate the impacts of the project based on the environmental baseline.

Furthermore, by including an analysis of the visual impacts of the LECEF, the Staff Analysis minimizes the visual impacts of the LECEF. Over half of the discussion of the visual impacts of this project is devoted to the impacts of the project assuming the U.S. DataPort is completed. This will confuse the decision-makers and the public, since the analysis does not make clear the nature of the visual impacts that would be created *by the commission's approval*. Accordingly, the addendum to the Staff Assessment should delete all analysis of the project's impacts. The comments that follow proceed on the assumption that the analysis includes only a discussion of the impacts of the LECEF as a stand-alone project.

2) Additional Key Observation Points Should Be Analyzed.

The Key Observation Points evaluated by staff are insufficient. According to the Analysis Methodology (Appendix VR – 2), "KOPs are selected to be representative of the most critical locations from which the project would be seen."[1] (SA, p. 4.12-40.) Staff analyzed three KOPs of varying degrees of impacts. Milpitas would agree that KOP 1, the view from 237, is a critical location from which the project would be viewed. However, Milpitas believes that KOPs 2 and 3 are not representative of the most critical locations from which the project would be seen. KOP 2, the view from Zanker Road, which is to the west of the project site, is not a critical viewshed because of the lack of viewers and the "moderate visual quality" of the views. KOP 3, the view from the nearest Alviso residences, which are approximately 1.7 miles away, is too far away from the site to be impacted.

Of greater concern should be those well traveled (and soon-to-be well traveled) locations from which the project would be seen to the east (in the City of Milpitas). A casual glance at Visual Resources Figure 1 discloses that viewsheds on the eastern side of the project—the location of the nearest land developed with sensitive uses—has been completely ignored. To remedy this deficiency, Milpitas recommends that the following KOPs be added to the analysis as part of the Addendum to the SA.[2] As we describe below, the visual impacts disclosed from these locations are likely to be significant, and therefore they are among the "most critical locations from which the project would be seen."

a) View from west-bound SR 237

It is unclear why the view from west-bound SR 237 was not included in the KOPs. The Addendum should analyze it as a potential KOP. The view over the site is fairly expansive, given the lack of structures in the foreground.

b) Bay Trail Segment Along West Side of Coyote Creek

At various places, the Staff Assessment notes that the LECEF would have substantial impact on the views from the Bay Trail, which runs along the eastern side of the Coyote Creek corridor approximately 750 feet to the west of the project site. (See, for example, SA, p. 4.12-4 [noting that the project would be "prominently visible in foreground views" from the Bay Trail].) The impact is considered in a narrative fashion, but visual simulations and a full analysis of the impacts of the LECEF on the Bay Trail are not included.

This Bay Trial segment is clearly among the most critical locations from which the project would be seen, and a KOP for the Bay Trail must be included in the Addendum to the SA. It is recognized as an important public facility not just at the local level but also at the state and federal level. (See discussion at pages 4.5-11–4.5-12 of the SA [noting that the trail segment is part of the state mandated Bay Trial and the Juan Bautista De Anza National Historic Trail.) In addition, Milpitas is currently beginning the design and construction process for the trail and expects it to begin construction in the fall of 2002. In addition, under San Jose's planning documents, the proposed

[1] Commission regulations describe KOPs as "the view areas most sensitive to the visual impacts of the project." (See Cal.Code Regs., tit. 20, div. 2, ch. 5, Appendix B, subd. (g)(6)(A)(1).)
[2] Milpitas believes that the applicant, in response to discussions with Milpitas, may have already prepared photosimulations associated with some of these views.

Bay Trial is a "scenic vista" that needs to be carefully analyzed.[3] (See U.S. DataPort Draft EIR, p. 163, 170.) Despite the importance of this facility, and its status as a scenic vista, not one of the KOPs for this project includes the view from the proposed Bay Trail.[4] Indeed, the Staff Assessment, without adequate explanation, concedes that the staff rejected the City of San Jose's direct invitation to include such a KOP. (See SA, p. 4.12-30.) It is unclear why staff has chosen to ignore this clearly important public facility.

c) View from upper floors of new buildings in McCarthy Ranch.

The Staff Assessment notes that, even with the construction of the U.S. DataPort project, the upper portion of LECEF facilities would be visible to the upper floors of some of the office buildings in the McCarthy Ranch development along the east side of Coyote Creek. (SA, p. 4.12-4.) We presume this reference is to the Veritas campus buildings currently under construction in Milpitas along the Coyote Creek corridor. CEC staff has previously noted that viewer sensitivity is high for people working in a high quality work environment.[5] (Metcalf Final Staff Report, p. 303.) Accordingly, the view from the upper floors of the Veritas campus is among the most critical locations from which the project would be seen, and the Addendum to the SA should include it as a KOP.

d) View from McCarthy Ranch Boulevard/SR 237 Overcrossing

It is not clear whether the LECEF would be viewable from the McCarthy Ranch Boulevard/SR 237 overcrossing. Since the overcrossing is raised, it is likely that the existing vistas from the overcrossing over the project site could potentially be impacted by the LECEF. The Addendum should analyze the impact of the LECEF on the view from the overcrossing and determine whether an additional KOP is appropriate.

e) View from upper floors of Crowne Plaza in Milpitas

An approximately ten-story hotel—the Crowne Plaza—is within approximately ½ mile of the LECEF project site and within the City of Milpitas. It is likely that the LECEF would be viewable from the upper floors of the Crowne Plaza, and it is likely that viewer sensitivity from the rooms—much like residences—would be high. Accordingly, the Addendum should analyze the impact of the LECEF on the view from the hotel and determine whether an additional KOP is appropriate.

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[3] The Bay Trail should also be considered a "scenic corridor" under the CEC's regulations (which presumably is the same as scenic vista. A "scenic corridor" is described as "that area of land with scenic natural beauty, adjacent to and visible from a linear feature, such as a road, or river." (Cal.Code Regs., tit. 20, div. 2, ch. 5, Appendix B, subd. (g)(6)(C).)

[4] This is not the only mistake in the Staff Analysis with regards to the Bay Trail. In the cumulative impacts analysis of the project's existing setting, it is noted that upon construction of the U.S. DataPort project the impacts on the proposed Bay Trail would be minimized by landscaping and the surrounding buildings. (See pp. 4.12-15–4.12-16.) However, in analyzing the cumulative impacts without the U.S. DataPort project, the impacts on the Bay Trail are completely ignored.

[5] We note that the staff's Analysis Methodology notes that "[c]ommercial uses, including business parks, typically have low-to-moderate view concerns, though some commercial development . . . indicate high view concern." (p. 4.12-41.) The inconsistency with the Metcalf analysis should be explained.

3) The Impacts of the Project on "Scenic Vistas" Are Necessarily Significant Because of the City of San Jose's Previous Findings for the U.S. DataPort Project.

In its pending petition to remove the LECEF project from the four-month process, Milpitas pointed out that the City of San Jose already found that the visual impacts of the U.S. DataPort project would be significant and unavoidable because of the impacts on the scenic vistas from SR 237 and the Bay Trail. The Staff Assessment completely ignores the comments made by Milpitas in its petition for removal. The entirety of the staff analysis concerning whether the LECEF would have a substantial adverse impact on a scenic vista follows:

> The openness of the site's level, undeveloped terrain allows for panoramic vista views to the east and north across the site to Mission Peak and the East Bay Hills. The opportunity for such distant sightlines to the north-trending ridgeline of the East Bay Hills is becoming increasingly rare along the fast developing SR-237 corridor. The proposed project structures would partially impair though not completely block these vista views. However, screening vegetation necessary to minimize degradation of existing visual quality could inadvertently block vista views to the ridgeline of the East Bay Hills. This could occur if screening vegetation is planted too close to SR-237 as is shown in the simulation presented as VISUAL RESOURCES Figure 4. Vegetation planted in close proximity to SR-237 screens the more northerly ridgeline as illustrated on the left side of Figure 4. The result is that the panoramic vista view is substantially constrained, causing an adverse and significant impact under this criterion. Staff's proposed Condition of Certification VIS-3 would preserve these more distant sightlines while still screening the majority of the proposed project features, thereby ensuring that a significant visual impact does not result from blockage of scenic vistas. The project's cooling tower vapor plumes would be visible from nearby roadways and residences. However, due to the relatively low frequency of plume occurrence, small plume size, and non-persistent nature of these plumes, the resulting visual impact on vista views would be less than significant.

This analysis must be substantially revised. The significance criterion requires a two-part inquiry. First, one asks whether the project is viewable from a scenic vista. In this case, the City of San Jose concluded that two scenic vistas existed—State Route 237 and the Bay Trail. (See U.S. DataPort Draft EIR, pp. 163, 170.) The Staff Assessment apparently acknowledges only that SR237 is a "scenic vista." There is no doubt that the Bay Trail, for the reasons noted above, is a "scenic vista" of utmost importance. The analysis should be revised to analyze the impact of the project on the Bay Trail.

The second inquiry is whether the project would have a substantial adverse impact on that scenic vista. The Staff Assessment did not perform this inquiry for the Bay Trail. With respect to the SR 237 vista, the SA concludes that the project would substantially affect the view of Mission Peak from SR 237; however, it concludes that appropriately placed landscaping would reduce this impact to a level of insignificance. The SA does not explain how simply screening the buildings will reduce this impact to a level of insignificance. While these measures could potentially soften the impact of the introduction of a power plant into the view of Mission Peak from SR 237, Milpitas does not believe that this impact can be reduced to a level of insignificance. Review of the photo

simulations discloses that the addition of the power plant, even with landscaped screening, would be a major change to the vista from SR 237. (Compare SA, VR-Figure 2 with VR-Figures 4 and 5.) We believe this blockage is substantial notwithstanding that it would be only partial. The SA needs to explain why staff believes this change in the view is not a substantial impact so that the public can evaluate the conclusion. The visual simulations should be updated to reflect the "result" of staff's proposed screening mitigation measure. Furthermore, although the U.S. DataPort project included a landscaped berm around the site and various other mitigations to minimize the visual impacts of the project, in the environmental review for the U.S. DataPort project, the City of San Jose still concluded that the impact on the scenic vista from SR 237 would be a significant unavoidable impact. The SA does not explain why its conclusion is to the contrary.

Accordingly, the Addendum should include:

(a) a revision to include an analysis of the impact on the scenic vista from the Bay Trail;

(b) an explanation of how the mitigation measures will reduce the visual impacts of the LECEF on the scenic vistas from SR 237 and the Bay Trail to a level of insignificance, if indeed they can; and

(c) an explanation of why the staff's significance finding deviates from the finding of the City of San Jose in the U.S. DataPort EIR and CEQA findings.

4) The Staff Assessment's Conclusion that the LECEF's Standalone Impact on Visual Resources Would Be Moderate Is Not Adequately Supported.

The SA analyzes the visual impacts of the standalone LECEF on the view from SR 237 under the CEQA criterion that asks whether the project would "substantially degrade the existing visual character or quality of the site and its surroundings." The analysis relies on an impact analysis based on various criteria rating categories such as visual quality, viewer concern, and visual sensitivity from low to high. The resulting conclusion that the impact of the construction of LECEF on the view from SR 237 is "adverse but not significant" lacks credibility for the reasons detailed below.

Staff's methodology and criteria are difficult to follow. For instance, the "Analysis Methodology" states that view quality ranges from outstanding to low. It fails, however, to describe the ranges in between outstanding and low, and how they relate to CEQA's significance criteria. The Addendum needs to explain the criteria used to evaluate visual impacts in greater detail so that the conclusions reached can be evaluated by the public.

The SA notes that the existing setting results in a moderate to high visual sensitivity reflecting the moderate visual quality of the view of Mission Peak, moderate viewer concern, and high viewer exposure. First, it is hard to understand how a "foreground to middle ground *panoramic* view of an *open rural* landscape" (albeit bordered by transportation infrastructure) with a backdrop of Mission Peak and the East Bay hills (see SA, appendix VR-1, p. 4.12-37) is graded "moderate" for visual quality. KOP 1 compares favorably to other views described as of *moderately high* visual quality in the Metcalf proceeding. (See Final Staff Assessment, Metcalf Energy Center, Visual Resources, Figures 8, 9.) The SA needs to explain in more detail how it reached this conclusion.

The analysis next concludes that "the overall visual change that would be experienced at KOP 1

would be moderate." This conclusion is so despite that the visual contrast is "moderate to *high*" the project is codominate (which we presume means the project and view of Mission Peak are similarly dominant), and the view blockage is moderate. The nature of this conclusion needs to be explained in more detail so that it can be evaluated.

Despite finding that the overall visual change is moderate, the analysis concludes that the resulting visual impact on SR 237 and the bay trail "would be adverse *and significant*." (SA, p. 4.12-13.) However, the SA again concludes that this impact can be reduced to a level of insignificance—through landscaped screening—despite San Jose's findings in its environmental review of the U.S. DataPort EIR. For the same reasons described in the previous subsection, this conclusion is unsound. In addition, it is further undermined by the weakness of the findings described in this subsection.

Finally, the analysis of whether the project would substantially degrade the existing visual character or quality of the site and its surroundings should not be limited to the view from SR 237 of Mission Peak and the East Bay hills. While the impacts on the Bay Trail and the existing bike trail are mentioned (see SA p. 4.12-13), the full visual impact analysis is limited to the impact on the view from SR 237 and the other KOPs. (See Appendix VR – 1, p. 4.12-36.) The analysis should do a full evaluation of the impact on at least the KOPs suggested above.

5) Nighttime Impacts

The SA concludes that "[g]iven the lack of existing lighting at the project site, the proposed lighting has the potential to change the character of the existing landscape at night. . . ." (SA, p. 4.12-15.) Milpitas believes that the project would change the character of the landscape. However, the SA concludes that the impacts are less than significant with mitigation. Since minimizing direct lighting and illumination of the night sky (see Condition VIS-4) will not necessarily be sufficient to mitigate the impacts of the light created by the project, the Addendum should explain how this conclusion is reached. The Addendum should also describe in additional detail the nature of the night lighting that would be required for operational safety and security.

6) Plume

The City is concerned that the plumes from the power plant will be viewable from a significant area of Milpitas. The SA does not specify the distances from which the plumes would be viewable.

7) Miscellaneous Comments.

a) The staff assessment notes that the image presented in Figure 4 is "substantially smaller than life-size scale." Please explain this comment. Does the figure not accurately reflect the alterations to views that would take place if the LECEF were constructed? Does Figure 3 have the same problem? They appear substantially identical in scale.

b) The section on viewer exposure without the U.S. DataPort fails to mention that the site would be viewable from the upper floors of the office buildings in McCarthy Ranch. (SA, p. 4.12-4.

c) The staff assessment consistently uses the phrase "adverse but not significant" to describe

the impacts. (See SA, pp. 4.12-8–4.12-10, 4.12-13–4.12-14.) This is unusual and confusing terminology. How does the staff distinguish effects that are adverse from those that are significant? Our review of the "analysis methodology" did not disclose any criteria that used the terminology staff uses. It would be helpful if the Staff Assessment used terminology used in CEQA criterion it is analyzing.

WORKER SAFETY AND FIRE PROTECTION:

City staff was unable to complete its review of the worker safety and fire protection section. We anticipate providing written comments at or prior to the workshop.

ALTERNATIVES:

Alternatives Figure 1 ("Map of Proposed Project and Alternative Sites") was not included in the SA.

Is it proper to include as one of the project objectives "to be on line by summer of 2002"? By including this objective, only the LECEF project will meet the objective. What is the purpose of having the project online by summer of 2002? Is it simply to meet the requirements of the four-month process? That is circular logic and is inconsistent with CEQA.

Edenvale Redevelopment Area. It would appear that the Edenvale Redevelopment Area is a viable alternative location for this project. Milpitas believes that this location may be an environmentally better location. However, it is apparently rejected because the applicant could not meet the objective of having the project online by summer of 2002. In the disadvantages section of the Edenvale Redevelopment option, the SA states that the alternative may impact potential business developments in the area; yet, the LECEF project in its current location may impact planned business developments as well.

No Project. In reviewing the project's objectives and the no-project alternative, Milpitas concluded that the SA should include an alternative that permits the LECEF project going forward only if the U.S. DataPort project goes forward. Indeed, the SA describes providing reliable power to the DataPort as the critical project objective. However, the no-project alternative assumes that, if the LECEF project did not go forward, the U.S. DataPort project would go forward with the diesel generators that were originally proposed and rejected by San Jose. That assumption is inconsistent with the U.S. DataPort's conditions of approval.

San José Fire Department
Lacy Atkinson, Fire Marshal

January 23, 2002

Robert Worl
Siting Project Manager
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512

Re: Los Esteros Critical Energy Facility (01-AFC-12) Final Staff Study

Dear Mr. Worl:

Reference is made to a letter from Paul Richins, Jr. dated January 2, 2002. The San Jose Fire Department (SJFD) has reviewed the Los Esteros Critical Energy Facility (01-AFC-12) Final Staff Study and has the following comments:

1. On page 4.4-2, the last paragraph states that "Section 25503.5 of the California Health and Safety Code requires facilities which store or use hazardous materials to prepare and file a Business Plan with the local Certified Unified Program Authority (CUPA), in this case Santa Clara County." The regulation actually requires submittal to the administering agency for the program, which in this case is the San Jose Fire Department.
2. On page 4.4-3, the sixth paragraph under Uniform Fire Code states that "The administrating agency is the Central Fire Department Santa Clara County and the City of San Jose's Fire Department." According to the report, the site was annexed into the City of San Jose so the administrating agency should only be the San Jose Fire Department.
3. On Page 4.4-10, the fourth paragraph reads as follows:

   "**HAZ-2** The project owner shall provide a Risk Management Plan RMP (if required by regulation) and a Hazardous Materials Business Plan HMBP (which shall include the proposed building chemical inventory as per the UFC) to the San Jose Fire Department and the CPM for review at the time the RMP plan is first submitted to the U.S. Environmental Protection Agency (EPA)."

   If no RMP submittal is sent to the U.S. EPA, this statement would allow the applicant to **not** submit the Hazardous Materials Business Plan. The Hazardous Materials Business Plan should be submitted to the San Jose Fire Department regardless of a submittal of an RMP.

4. On page 4.14.9, the Construction Fire Protection and Prevention Plan (CFPPP) shall be submitted to the SJFD for review and approval prior to the start of construction. The CFPPP shall:

   - Address the requirements delineated in Articles 9 and 87 of the San Jose Fire Code.
   - Identify the different automatic fire suppression systems that will be installed in the buildings and structures within the power plant site.
   - Describe the fire alarm system and emergency alarm system that will be provided.

5. On page 5.1-17, **STRUC-4** states that "Tanks and vessels containing quantities of toxic or hazardous materials exceeding amounts specified in Chapter 3, Table 3-E of the 1998 CBC shall, at a minimum, be designed to comply with Occupancy Category 2 of the 1998 CBC." The occupancy groups defined by the CBC are A, B, C, E, F, H, I, M, R, S, and U. Please define Category 2.

6. Please submit two copies of the "Application for Certification" for the Los Esteros Critical Energy Facility dated August 6, 2001, with supporting documentation and any subsequent revisions. Additional comments may be forthcoming upon review of the Application for Certification.

If you have any questions or need further clarifications, please call me at (408) 277-8755.

Sincerely,

Edward Tolentino
Supervising Fire Protection Engineer
Bureau of Fire Prevention
San Jose Fire Department

ET:mlm

ENG7/TOLENTINO/LETTS02/LOSESTEROS

Pacific Gas and Electric Company

245 Market Street
San Francisco Ca 94105
Mailing Address
Mail Code N10A
P.O. Box 770000
San Francisco, CA 94177

Date: January 11, 2002

Robert Worl
Project Manager
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

SUBJECT: STAFF ASSESSMENT LOS ESTEROS CRITICAL ENERGY FACILITY (01-AFC-12)

Dear Mr. Worl:

Pacific Gas and Electric Company (PG&E Co.) respectfully submits comments on the Staff Assessment for the Los Esteros Critical Energy Facility (01-AFC-12) proposed by Calpine Corporation.

The Staff Assessment addresses PG&E Co.'s plans to construct the Northeast San Jose Transmission Reinforcement Project. As you may know, PG&E Co., the California Independent System Operator, and the California Public Utilities Commission (CPUC) have all concluded that the Northeast San Jose Transmission Reinforcement Project is urgently needed to ensure reliable electric service in the Greater San Jose area. On December 11, 2001, the CPUC issued a Final Decision, effective immediately, granting PG&E Co. a Certificate of Public Convenience and Necessity for the project and ordering PG&E to build the project as described in the CPCN.

The reinforcement project as approved by the CPUC, which has exclusive jurisdiction over the siting of electric transmission facilities in California, includes a transmission substation located on the northern part of the 55-acre property owned by North San Jose Energy Center, LLC, a subsidiary of Calpine Corporation. As part of its review of the project under the California Environmental Quality Act, the CPUC determined that the north portion of the North San Jose Energy Center property is the environmentally superior location for the substation and, based in part on that finding, ordered PG&E to construct the substation at that location. Thus, PG&E Co. may not lawfully construct the needed facilities at any other site. The substation is scheduled to be in operation by May 2003.

As a general matter, the California Energy Commission's analysis of Calpine's proposed Los Esteros Critical Energy Facility must continue to recognize that the north portion of the North San Jose Energy Center property will be occupied by the CPUC-ordered transmission substation. Any alternative to, or variant of, the Calpine project that would require Calpine to utilize all or part of the substation site will interfere with PG&E's CPUC-ordered construction activities, and is therefore infeasible under CEQA. PG&E Co. respectfully requests that it be promptly informed of any changes to the Calpine project, or any alternatives thereto, that contemplate use by Calpine of the CPUC-approved substation site.

Although the Calpine project as presently described appears to account for the presence of the CPUC-ordered substation on the north portion of the North San Jose Energy Center property, there are at least three areas of the Staff Assessment in which changes should be made. First, on page 4.2-14 of the Biological Resources section under "Worker Parking and Staging Areas" the text states that the worker parking and staging area will be in the northwest section of the applicant's property. This plan may cause a conflict with the CPUC order requiring PG&E Co.

to construct a substation in the same area. PG&E Co. will need access to this area beginning in May 2002. We request that the worker parking and staging area for the power plant project be moved southerly at least 780 feet from the northerly boundary line of North San Jose Energy Center's property.

Second, on page 4.12-13 of the Visual Resources section, the fourth sentence of the first full paragraph states, "[a]lso, landscaping would need to be extended along the north side of the project site." PG&E Co. believes that this mitigation measure is unnecessary because PG&E Co. plans to install landscaping along the north side of its substation. The substation will be north of and between the planned bay trail south of the Water Pollution Control Plant sludge drying beds and the Los Esteros Critical Energy Center. We recommend that this mitigation measure be deleted.

Third, the Staff Assessment as a whole must address the potential environmental impacts caused by the temporary transmission line connecting the plant with the Trimble-Nortech 115 kV transmission line located at Zanker Road and State Route 237. PG&E Co. cannot construct transmission facilities over 50 kV unless authorized under the CPUC's General Order 131-D. Unless otherwise exempt under GO 131-D, 115 kV transmission lines require a "Permit to Construct" from the CPUC. However, 115 kV lines that have already undergone environmental review by another agency as part of a larger project are exempt from the CPUC's Permit to Construct process. Thus, if the CEC's environmental analysis ultimately concludes that the temporary transmission line will have no significant unavoidable environmental impacts, and if that finding is included in a final Staff Assessment certified by the full Commission, PG&E Co. can then file for an exemption from the CPUC's Permit to Construct process. If, on the other hand, the Staff Assessment fails to analyze the temporary transmission line and make the required findings, PG&E will have to obtain a Permit to Construct, and undergo a separate environmental review taking as long as 18 months, before it may construct the temporary line.

Sincerely,

Robert Bonderud

cc: Judith Iklé, California Public Utilities Commission
Susan Lee, Aspen Environmental

PROJECT DESCRIPTION

Supplemental Testimony of Robert Worl

Page 3-2: Paragraph 5 at the bottom of the page references **Figure 3**, The Planned Configuration of Equipment and Systems for LECEF. The attached Figure 3, should be substituted for the one in the SA.

SJ-1 **On Page 3-2, PROJECT DESCRIPTION**, second paragraph, third sentence needs to be corrected to state that the Cilker farm is located to the east of the project, not west.

Response: The sentence should read: "To the east lies the Cilker farm property, the flood control dike and channel bordering Coyote Creek."

SJ-2 **Page 3-5**, Peak water consumption is noted here as 566 gallons per minute but 4.9-7 cites it as 536 gpm.

Response: The discrepancy is based on comparing a conversion of acre feet per year to an average use rate (536 gpm), and a maximum projected use rate on a hot day of 566 gallons per minute.

SJ-3 The project description needs to describe the inclusion of the Emergency Generator and Fire Pump Engine on the project and their intended use.

Response: The LECEF will also contain a 600 kW gas-fired generator for the provision of emergency power and lighting in case of any interruption in CTG operation, and power from the grid. Also, should a fire emergency arise at or adjacent to the facility, a 368 bhp diesel-fueled engine and fire pump are on the LECEF site. The fire pump will serve to maintain protection systems and hose stations within the LECEF site, and insures that proper water pressure and supply is maintained for fire fighting in case of an emergency.

SJ-5 **Figure 2** needs to show the alignment of the Bay trail, transecting from east to west on the northern border of US Dataport.

Response: The revised Figure 2, Project Description contains the proposed City of San Jose Bay Trail allignment, Reaches 1 and 2. These potential trails are also evaluated in the **VISUAL RESOURCES** section. When constructed, Reach 1 would extend northward along the west flood control levee of Coyote Creek for a distance of .9 miles connecting with the City of Milpitas Berryessa Creek Trail north of Dixon Landing Road. Reach 2, would extend east and west from Zanker Road north of the LECEF project site, connecting to the Reach 1 spine trail. Reach 2 is to be build along an easment north of the project site that will be dedicated to the City of San Jose by the U.S. DataPort project as a condition of that project's development.

SJ-6 In the References section, the City prepared an Environmental Impact *Report*, not *Statement*, for the US Dataport project.

Response: The correct citation in the **PROJECT DESCRIPTION REFERENCES** should read as follows:

City of San Jose. 2001. Draft and Final Environmental Impact Report, US DataPort Project. Approved April 3, 2001.

REFERENCES
Page 3-7 of this section should have the following reference added:

City of San Jose. 2001. Pre-Final The Bay Trail Master Plan City of San Jose. June 2001.

AIR QUALITY

Supplemental Testimony of Gabriel D. Behymer

INTRODUCTION

The Staff Assessment (SA) published December 31, 2001, evaluated the expected air quality impacts of the emissions of criteria air pollutants due to the construction and operation of the proposed Los Esteros Critical Energy Facility (LECEF). This Supplement to the Staff Assessment provides corrections and supplemental information to the Staff Assessment.

Ambient PM10

On page 4.1-9 and 4.1-10 of the SA the following changes were made:
The Greek letter "mu" or σ, representing 10^{-6} or one millionth, did not print correctly in **AIR QUALITY Table 4** or **AIR QUALITY Table 5**. Both tables are reprinted here to clear up any confusion:

AIR QUALITY Table 4
BAAQMD PM10 Maximum 24-hour Average Concentrations
and Number of Measurement Periods (6-day periods)
In Violation with the State AAQS

Station	PM10	1993	1994	1995	1996	1997	1998	1999	2000
Marin County Summary	24-Hour High Avg. ($\sigma g/m^3$)	69	72.4	74.2	50.3	72	52.4	75.6	39.5
	State Violations	1	4	1	0	2	1	2	0
SF County Summary	24-Hour High Avg. ($\sigma g/m^3$)	69	93	49.9	70.9	81	52.4	77.9	63.2
	State Violations	5	6	0	2	3	1	6	2
Alameda County Summary	24-Hour High Avg. ($\sigma g/m^3$)	84	96.9	51.7	71.1	64.7	62.7	87.9	71.2
	State Violations	4	4	2	1	2	2	3	2
Contra Costa County Summary	24-Hour High Avg. ($\sigma g/m^3$)	81	87	72.7	75.6	77.8	66.8	100.6	62.0
	State Violations	7	6	4	1	3	2	7	1
Santa Clara County Summary	24-Hour High Avg. ($\sigma g/m^3$)	101	92.6	59.7	76.1	95	92	114.4	76.1
	State Violations	9	9	4	2	3	3	7	7
San Jose 4th Street	24-Hour High Avg. ($\sigma g/m^3$)	92	92.6	59.7	76.1	78	92	114.4	76.1
	State Violations	8	7	4	2	3	3	5	7
San Jose Piedmont Road	24-Hour High Avg. ($\sigma g/m^3$)	NA	NA	57.4	58.7	55.3	54.4	NA	NA
	State Violations	NA	NA	1	2	1	1	NA	NA
San Jose Moorpark Avenue	24-Hour High Avg. ($\sigma g/m^3$)	76	66.6	54.5	58.4	60.7	42.5	NA	NA
	State Violations	3	4	1	1	3	0	NA	NA
San Jose Tully Road	24-Hour High Avg. ($\sigma g/m^3$)	101	90.2	48.6	66.8	95	88.5	96.5	68.5
	State Violations	7	7	0	1	3	1	4	2
Basin Wide Summary	24-Hour High Avg. ($\sigma g/m^3$)	101	96.9	74.2	76.1	95	92	114.4	76.1
	State Violations	11	10	7	3	4	5	12	7

Source: California Air Resources Board

State 24-Hour Ambient Air Quality Standard for PM10: 50 $\sigma g/m^3$
Federal 24-Hour Ambient Air Quality Standard for PM10: 150 $\sigma g/m^3$
NA = PM10 data is not available for these years at these sites.

AIR QUALITY Table 5
Maximum Concentration of O_3 (Ozone) and
Number of Days in which the State Ozone Standard was Violated

Station	Ozone	1993	1994	1995	1996	1997	1998	1999	2000
Marin County Summary	Highest 1 hour Average (ppm)	0.080	0.089	0.088	0.105	0.106	0.074	0.102	0.071
	State Violations	0	0	0	2	1	0	2	0
SF County Summary	Highest 1 hour Average (ppm)	0.080	0.055	0.088	0.071	0.068	0.053	0.079	0.058
	State Violations	0	0	0	0	0	0	0	0
Alameda County Summary	Highest 1 hour Average (ppm)	0.13	0.129	0.155	0.138	0.114	0.146	0.146	0.137
	State Violations	8	7	21	23	6	22	15	5
Contra Costa County Summary	Highest 1 hour Average (ppm)	0.130	0.121	0.152	0.137	0.108	0.147	0.156	0.138
	State Violations	10	6	12	15	4	16	8	2
Santa Clara County Summary	Highest 1 hour Average (ppm)	0.130	0.130	0.145	0.129	0.114	0.147	0.125	0.113
	State Violations	14	8	22	24	3	22	12	4
Gilroy	Highest 1 hour Average (ppm)	0.11	0.101	0.13	0.121	0.095	0.135	0.105	NA
	State Violations	6	3	10	15	1	10	3	NA
Los Gatos	Highest 1 hour Average (ppm)	0.13	0.118	0.141	0.129	0.097	0.133	0.117	0.080
	State Violations	8	2	13	10	1	5	4	0
Mountain View	Highest 1 hour Average (ppm)	0.11	0.084	0.116	0.106	0.114	0.097	0.114	NA
	State Violations	2	0	2	3	1	2	7	NA
San Jose 4th Street	Highest 1 hour Average (ppm)	0.11	0.112	0.134	0.11	0.094	0.147	0.109	0.073
	State Violations	3	2	14	5	0	4	3	0
San Jose Piedmont Road	Highest 1 hour Average (ppm)	0.11	0.116	0.145	0.118	0.095	0.129	0.116	0.096
	State Violations	5	3	15	5	1	5	2	1
San Martin	Highest 1 hour Average (ppm)	NA	0.13	0.128	0.115	0.091	0.144	0.125	0.113
	State Violations	NA	5	14	18	0	15	7	4
Basin Wide Summary	Highest 1 hour Average (ppm)	0.130	0.130	0.155	0.138	0.114	0.147	0.156	0.152
	State Violations	19	13	28	34	8	29	20	12

Source: California Air Resources Board

State 1 hour Ambient Air Quality Standard for Ozone: 0.09 ppm (180 $\sigma g/m^3$)
Federal 1 hour Ambient Air Quality Standard for Ozone: 0.12 ppm (235 $\sigma g/m^3$)
NA = Ozone data is not available for these years at these sites.

Project Operating Emissions

On **pages 4.1-15, and 4.1-16** the following corrections are made: **AIR QUALITY Table 8** contained an error, the turbine BACT for CO has been changed by the district from 5.0 ppmvd to 4.0 ppmvd, and the diesel fire pump engine specified for the project has changed. The corrected and updated **AIR QUALITY Tables 7, 8** and **9** are presented below (deleted text is shown as and added text is shown as underlined):

AIR QUALITY Table 7
Individual Equipment Maximum Short-Term Emissions
(pounds per hour [lb/hr])

OPERATIONAL PROFILE	NO_x	POC	PM_{10}	CO	SO_2
1 CTG Startup	7.7	0.68	2.5	7.7	0.33
1 CTG Steady State, 100% load	8.55	1.18	2.5	4.16	0.33
4 Turbines, worst case	34.20	4.72	10.0	30.8	1.32
Cooling Tower	-	-	0.09	-	-
Emergency Generator	1.77	1.4	0.28	3.0	0.005
Diesel Fire Pump Engine	3.44	0.10	0.06	0.18	0.10
TOTAL MAXIMUM SHORT-TERM EMISSIONS	37.64	6.1	10.4	33.8	1.42
Note: The applicant has committed to not testing the Emergency Generator and the Diesel Fire Pump on the same day, thus the total value includes only the higher of the two for each pollutant. The applicant will further be prohibited by condition of certification from testing the two pieces of equipment concurrently.					

AIR QUALITY Table 8
Project Maximum Daily Emissions
(pounds per day [lb/day])

	NO_x	POC	PM_{10}	CO	SO_2
Four CTGs	820.8	113.28	240.0	413.52	31.68
Cooling Tower	-	-	2.16	-	-
Emergency Generator *	1.77	1.4	0.28	3.0	0.005
Diesel Fire Pump Engine *	3.44	0.10	0.06	0.18	0.10
Total Maximum Daily Emissions *	824.2	114.7	242.4	416.5	31.78
* The applicant will be prohibited by condition of certification from testing the Emergency Generator and Diesel Fire Pump Engine on the same day.					

AIR QUALITY Table 9
Project Maximum Annual Emissions
(tons per year [ton/year])

Operational Profile	NO_x	POC	PM_{10}	CO	SO_2
Four Turbines	74.9	20.8	43.8	75.47	5.8
Cooling Tower	-	-	0.394	-	-
Emergency Generator (100 hours/year)	0.09	0.07	0.014	0.15	0.00023
Diesel Fire Pump Engine (100 hours/year)	0.17	0.005	0.003	0.009	0.005
Total Maximum Annual Emissions	75.2	20.9	44.2	75.63	5.8

ADEQUACY OF PROPOSED MITIGATION

Operations Mitigation

On **page 4.1-26**,of the SA the first sentence of the first paragraph should read "The proposed ERCs will fully offset the POC and NOx emissions from the project."

PM10 Mitigation

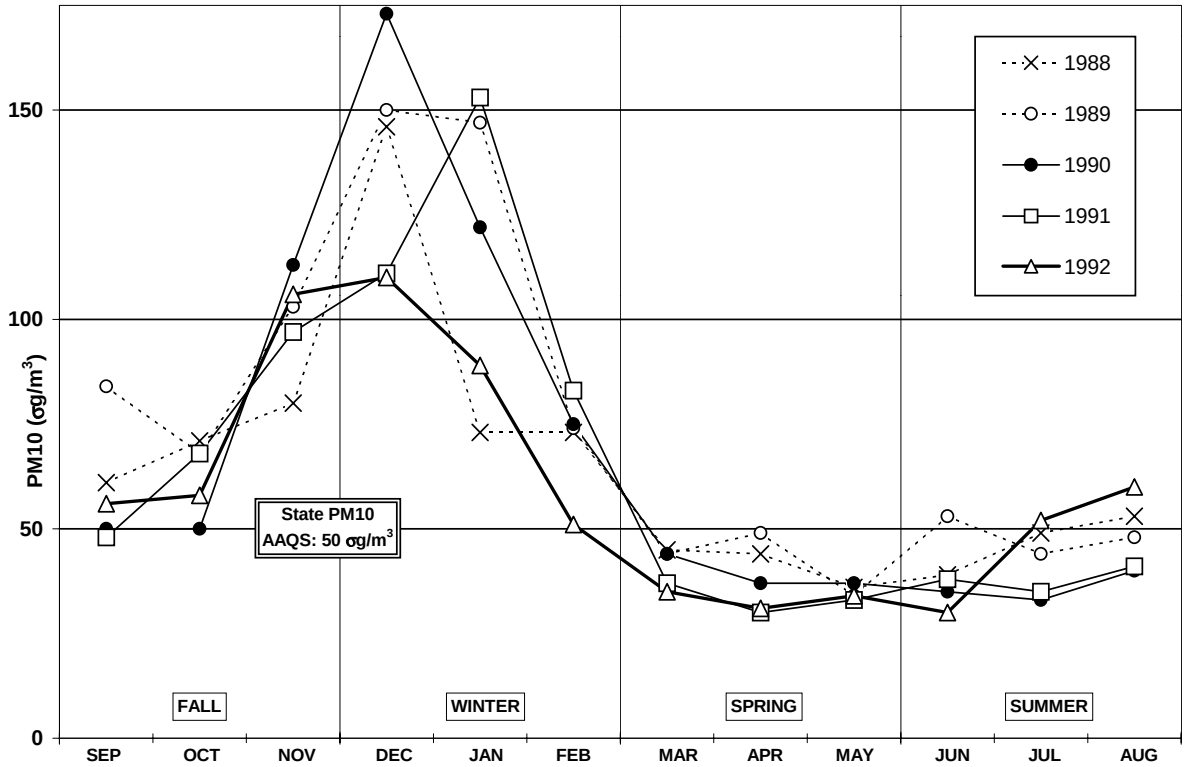
The following Supplement section is to be read in conjunction with the PM10 Mitigation section of the SA, pages **4.1-28 and 4.1-29**. The SA section discusses the initial PM10 mitigation proposed by the applicant. Subsequent discussions and work by the applicant have provided additional information and refinement of the mitigation strategies. This Supplement section represents the completed analysis and mitigation strategy for this project.

Although the Bay Area Air Basin is classified as nonattainment for the state PM10 AAQS, the project is not required by the BAAQMD to provide offsets because the quantity emitted is below the district's PM10 Offset Threshold of 100 tons per year (as set by District Rule 2-6-212.1). However, in staff's CEQA analysis the project's emissions could constitute a significant addition to an existing problem (violations of the state 24-hour PM10 standard) and thus require mitigation.

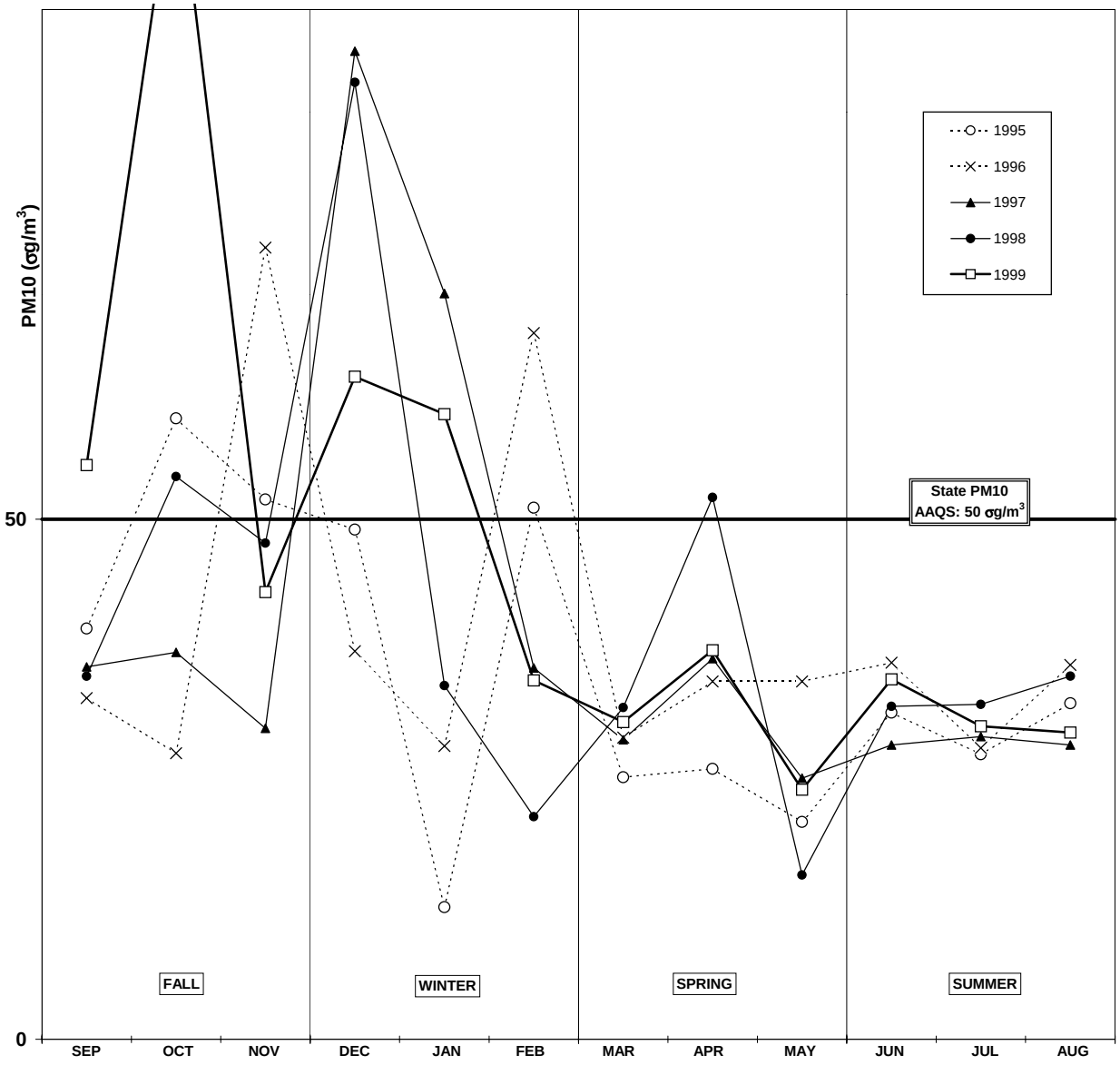
As discussed in the Staff Assessment, the applicant originally proposed "the payment of a mitigation fee, with the proceeds to be used for projects that will reduce PM10 emissions and ambient concentrations in the general vicinity of the project." Staff tentatively agreed with the applicant on this concept and proposed an amount of funds necessary to mitigate the project based on the average cost of ERC in the Bay Area Air Basin. However, further analysis since the publication of the Staff Assessment has resulted in a change to staff's recommendation. Rather then specifying an amount of funds needed to mitigate the project, staff proposes that the applicant secure a specific amount of PM10 mitigation. Because the project's PM10 emissions are clearly calculated in units of mass, a mitigation target in units of mass will yield a clearer nexus between impacts and mitigation.

Ambient PM10 is generally a seasonal problem. As night falls, air near the ground cools relatively rapidly and sinks, pooling overnight along valley floors. This effect can lead to a "temperature inversion" where lighter, warmer air acts as a lid over the colder air pooled in valleys. Under such conditions air pollution will accumulate in the still cold air near the ground. These conditions are most likely to occur during cold fall and winter evenings. Pollution generated at such times tends to remain over night, exposing the local population to extended elevated concentrations of pollutants. This is particularly a problem among California's coastal mountain ranges due to the concentration of population centers (and thus pollution) along valley floors. Though ambient PM10 levels in the Bay Area Air Basin in general have improved over the past fifteen years, numerous violations of the state PM10 AAQS continue to occur throughout the fall and winter quarters. **AIR QUALITY Table 19** presents the monthly maximum ambient PM10 levels for the years 1987 through 1992 from the 4th Street monitoring station in San Jose (about 7 miles south south-east of the project site) and the Tully Road monitoring station (about 13 miles south south-east of the project site). **AIR QUALITY Table 20** presents the same data for the years 1995 through 1999. Please note that the Tully Road data set begins in 1990 while the 4th street data set is continuous for the years presented.

AIR QUALITY Table 19
Monthly Maximum Ambient PM10 Levels
4th Street & Tully Road (San Jose) 1987-1992



AIR QUALITY Table 20
Monthly Maximum Ambient PM10 Levels
4th Street & Tully Road (San Jose) 1995-1999



Though a trend of general improvement can be seen in the data, it is also clear that PM10 emissions remain a problem through the fall and winter quarters. The data also shows that violations of the state PM10 AAQS rarely occur during the summer and spring quarters. Staff therefore proposes that the applicant mitigate for the quantity of PM10 emissions generated by the project during the fall and winter quarters. Since this is half the year, staff proposes that the applicant fully mitigate 22.1 tpy, half the projects total annual emissions of 44.2 tpy.

On January 29th, 2002, the applicant submitted a PM10 Mitigation Plan and scheduled a conference call to finalize the details of the plan for February 8th, 2002 (Sierra Research, "PM10 Mitigation Plan, Los Esteros Critical Energy Facility (01-AFC-12)").

The applicant proposes to focus mitigation efforts on two specific programs:

- A BAAQMD managed Wood Stove Retrofit or Replacement Program patterned after the BAAQMD managed Great Stove Changeout program (1998) and the mitigation program successfully implemented for the commission licensed Three Mountain Project.
- The CARB, CEC and BAAQMD managed Lower-Emission School Bus Program, specifically targeted to four school districts near the project site: Santa Clara Unified, Berryessa Union Elementary, Orchard Unified, and East Side Union High.

In addition to the two specific programs proposed above by the applicant, staff proposes that the applicant may implement other suitable programs in the vicinity of the project, contribute to the CARB managed Carl Moyer Diesel Engine Replacement Program, and/or surrender approved ERCs. However, each of these mitigation opportunities are not qualitatively equivalent with respect to mitigating the project's impacts. Staff thus recommends the five proposed mitigation opportunities be ranked as follows in order from most preferential to least:

1. The Wood Stove Retrofit or Replacement Program,

2. The Lower-Emission School Bus Program,

3. Other combustion related mitigation measures approved by the CPM via written CEC Air Quality Staff review,

4. The Carl Moyer Diesel Engine Replacement Program, and

5. Emission Reduction Credits (ERC).

Presented below is a summary of each proposed mitigation opportunity:

The Wood Stove Retrofit or Replacement Program

Residential wood burning stoves and fireplaces produce significant quantities of PM10, CO, NO_2 and POC. Many of the POC produced by wood burning are themselves irritating, toxic and/or carcinogenic compounds such as benzene, formaldehyde and benzo-a-pyrene. In addition, cold winter evenings when people are most likely to use wood burning stoves and fireplaces are often the same times during which air pollution is least likely to dissipate, as described above, and ambient PM10 levels are likely to be highest. Wood burning stoves and fireplaces are particularly significant sources of air pollution at these times because the closer the pollution is generated to the ground, the more likely it will be trapped there. BAAQMD has identified wood smoke as the largest contributor to violations of the state's 24-hour PM10 standard in the Bay Area Air Basin.

Modern, USEPA-certified wood burning devices emit approximately ten percent as much pollutant per hour of operation compared to a conventional fireplace or simple wood stove. Natural gas fired fireplace inserts and heating systems emit less then one percent as much pollutant per hour. In addition, because the newer systems are more efficient at heating, the device will spend less time in operation, thus further reducing total emissions.

Upgrading residential wood burning devices can significantly reduce total pollutant impacts, particularly PM10 and PM10 precursors. These reductions will occur in the immediate vicinity of the retrofit and almost exclusively during the fall and winter quarters, when ambient PM10 is most problematic. Wood stove and fireplace retrofits and replacements are thus an excellent mitigation opportunity for the Los Esteros Critical Energy Facility.

The Lower-Emission School Bus Program

Over 44 percent of California's public school bus fleet is more than 13 years old. These older busses emit substantially more PM10, NOx, CO, SO2 and POC then their modern diesel and gasoline counterparts. In addition, diesel PM10 has been identified as a toxic compound and represents a significant health hazard over and above the hazard represented by non-speciated PM10 (such a health based analysis, however, is outside the scope of the Air Quality section of this assessment). Approximately 72 percent of the state school bus fleet burns diesel while only approximately 2 percent of the fleet currently operates on an alternative fuel (compressed natural gas, liquefied natural gas, electric or propane). Pollution from school busses is of particular concern because it is generated near the ground (i.e. near where people breath) and they emitted predominantly near school children, who are more sensitive to pollutants then adults.

The Lower-Emission School Bus Program is divided into two components: the Lower-Emission School Bus Replacement Program and the Lower-Emission School Bus Particulate Matter Retrofit Program.

The Lower-Emission School Bus Replacement Program provides incentives to qualifying school districts to purchase new busses as replacements for older diesel busses. Pre-1977 busses that are replaced must be destroyed, while 1977 through 1986 model year busses must be either destroyed or used to replace a pre-1977 bus which then must be destroyed. The program also provides some relief for refueling infrastructure construction costs if necessary. Each bus replaced would cost between approximately $80,000 and $120,000. Each upgraded bus would yield approximately 28 pounds of PM10 reduction per year (as well as a significant quantity of NOx, POC and CO).

The Lower-Emission School Bus Particulate Matter Retrofit Program provides incentives to retrofit medium age diesel school busses with particulate filters. The program estimates a cost of $6500 per bus, including both the retrofit of the vehicle and a small offset for the higher fuel cost associated with the low sulfur diesel fuel necessary. The particulate filters combined with the use of low sulfur fuel is estimated to reduce particulate emissions by 85 percent. Each retrofit would yield approximately 14 pounds

of PM10 reduction per year (as well as a significant quantity of NOx, POC and CO), based on an average 15,000 vehicle miles per year.

Though replacing older school busses with alternative fuel vehicles and retrofitting existing diesel school busses with particulate filters will provide an excellent qualitative health benefit, staff is concerned that the cost per ton of PM10 reduction may be prohibitively high. Regardless, any PM10 emissions secured by way of the Lower-Emission School Bus Program in the general vicinity of the project should be considered excellent mitigation for the project's impacts.

Other Approved Mitigation Opportunities

Many other mitigation opportunities likely exist in the vicinity of the project site. Some examples include low emissions lawn mower subsidies, old vehicle buy-back and scrap programs, or the retrofit/replacement of diesel tug boats, commercial diesel fleet vehicles, municipal diesel fleet vehicles, municipal diesel busses, land fill heavy diesel equipment, or any local stationary heavy diesel engines. These or similar mitigation opportunities could conceivably provide greater public benefit and/or less capital resources then the opportunities detailed above. Staff recommends Condition of Certification AQ-SC4 to allow the Commission to approve other forms of effective diesel emissions abatement that may be discovered after the project is licensed. Such approval would be contingent upon a showing that the newly found emissions reduction opportunity was at least as effective as the other programs described above.

The Carl Moyer Diesel Engine Replacement Program

The CARB and BAAQMD managed Carl Moyer program provides state funded incentive grants "that would cover the incremental cost of cleaner on-road, off-road, marine, locomotive and stationary agricultural pump engines, as well as forklifts, airport ground support equipment, and Auxiliary Power Units."

The program is not focused on a specific locale, but rather on a regional mitigation effort. Nevertheless, the mitigation achieved through the program is real, surplus, enforceable, permanent and quantifiable. Staff proposes that, in the event that all reasonable local mitigation opportunities are exhausted, the applicant be allowed to contribute funds to the Carl Moyer Program managed by the BAAQMD and approved by CEC review. Since this mitigation opportunity would not generally be focused either on the fall/winter season or on the general vicinity of the project, it should be considered a fair mitigation option for the project's impacts.

Emission Reduction Credits (ERC)

In the event that no other reasonable mitigation opportunity exists in the vicinity of the Los Esteros Critical Energy Facility, the applicant may surrender banked ERC with approval of the CEC. Because ERC are specifically a regional mitigation mechanism, this should be considered only a fair mitigation option for the projects emissions.

COMPLIANCE WITH LORS

This section replaces the COMPLIANCE WITH LORS section on page 4.1-30 of the SA.

FEDERAL

The project complies with Clean Air Act 42 U.S.C. 7401 et seq.

STATE

With full mitigation (emissions offsets, mitigation plans, and/or controls) of all significant emissions from the project, staff anticipates compliance with Section 41700 of the California State Health and Safety Code.

LOCAL

The BAAQMD issued a Final Determination of Compliance on February 4, 2002, including a full set of permit conditions. The district and staff find the project in compliance with all district rules and regulations.

RESPONSES TO PUBLIC AND AGENCY COMMENTS

This section is added as there were no comment responses in the SA.

The City of San Jose

SJ-7 *"Need further clarification linking the Tables 8 and 9 showing how the total pounds per day of emissions in Table 8 equates to the tons per year shown in table 9."*

Response: The maximum annual emissions from the turbines for POC, PM10, CO and SO2 are based on 365 days per year of operation. Thus the annual maximums are 365 times the daily maximums plus 100 hours of operation of the fire pump and emergency generator. The NO2 annual emissions are based on a 2.5 ppm annual average concentrations emissions limit compared to the 5.0 ppm daily limit. Thus, the maximum annual NO2 emissions for the turbines is half of 365 times the daily maximum.

SJ-8 *"The Air Quality Section needs to clearly list the Thresholds of Significance to be used (quantitative & qualitative) before making assessments and conclusions regarding impacts."*

Response: The threshold of significance used in this analysis is "does the project's emissions cause a violation or contribute to an existing violation of the state or federal AAQS."

SJ-9 *"Future clarification is needed regarding the data shown in Table 13. Does this conclude that the modeled impact from the Diesel Pump and emergency*

generator will be over 210 ug/m^3 NO_2? Also please provide further clarification regarding the data listed in the Cumulative Impacts (Table 14) regarding NO_2. Does this conclude that NO_2 impacts from other projects will be 9 ug/m^3 NO_2?"

Response: **AIR QUALITY Table 13** presents two modeled maximum NO_2 impact results for LECEF. The first (13.4 σg/m^3) is the worst case impact without the diesel fire pump engine running. This will be the more likely worst case scenario. The second, higher, modeled impact (225.2 σg/m^3) is the worst case modeled impact with the diesel fire pump engine running. This impact is characteristic of any large diesel engine and will occur within a few hundred feet of the facility fence line. This is also a very conservative estimate, assuming worst case ambient conditions. It is unlikely the engine will be tested under such conditions. Please see the response to question SJ-12 below for a discussion of the Cumulative Impact analysis and **AIR QUALITY Table 14**.

SJ-10 *"Please list the sources for the project listed within the Cumulative Projects evaluation, including their location, size, and rationale for inclusion within the analysis."*

Response: Appendix 8.1G of the applicant's AFC contains a full discussion of the Cumulative Impacts Analysis. Included is Table 8.1G-1 "Modeling Parameters for Cumulative Impacts Analysis, Los Esteros Critical Energy Facility" which includes the UTM coordinates, emissions parameters and source information.

SJ-11 *"Given the high levels of emissions anticipated from construction activity, mitigation should include all "Control Measures" listed by BAAQMD as found within their CEQA Guidelines."*

Response: Staff agrees. The proposed Conditions of Certification below should fully address this concern.

SJ-12 *"On page 4.1-22, first paragraph, further clarification is needed regarding the conclusions listed here. How does the statement that there will be an increase by 0.2 ug/m^3 due to cumulative impacts relate to the 225.2 ug/m^3 NO_2 impacts in Table 13 and 234.3 ug/m^3 impacts in Table 14."*

Response: The cumulative modeling analysis involves the modeling of numerous potential local sources to ensure that no significant overlap of emissions impacts occur. The maximum impacts from both the LECEF facility and the other facilities included in the cumulative analysis occur near the respective emissions source. Since the LECEF 1.27 miles from the nearest potential cumulative source, there is very little interaction between the impacts. Thus only 0.2 σg/m^3 NO2 is added by the other sources included in the analysis to the point of maximum impact for the LECEF facility. Conversely, the conservative modeling shows that the LECEF emissions will add 0.0 σg/m^3 to the point of maximum cumulative impact.

SJ-13 *"Description of PM10 Mitigation needs to more closely analyze and conclude if the mitigation will reduce the identified significant impacts. When mitigating significant impacts, there needs to be a direct nexus between the mitigation and impacts, showing how the mitigation will measurably reduce impacts to a less than significant level. As worded and proposed, the mitigation listed is speculative and does not specify how it will be implemented and directly reduce the identified air quality impacts."*

Response: Please see the PM10 mitigation discussion above.

SJ-14 *"Generally, mitigation that includes the phrases "to the maximum extent possible" and "at the earliest feasible opportunity" should be avoided, as it does not adequately enforce the mitigation proposed (pg. 4.1-35 – AQ1&2)."*

Response: AQ-5 requires that the applicant to submit a Initial Commissioning Plan for review and approval. That plan will contain explicit procedures and time frames for all steps of the initial commissioning process. In addition, AQ-7 requires installation and operation of continuous emissions monitors prior to first fire, and AQ-10 places specific limits all emissions during initial commissioning.

CONCLUSIONS

This sections replaces the COCLUSIONS section of the SA on page 4.1-30.

The LECEF's emissions of NO_x, SO_2 and CO will not cause or contribute to a violation of any NO_2, SO_2 or CO ambient air quality standards, and therefore, their direct impacts are not significant. The project's air quality impacts from directly emitted PM10, the ozone precursor emissions of NO_x and POC, and PM10 precursors of NO_x, POC and SO_2 could be significant if left unmitigated. The project owner/operator will use the best available control technology to limit the project's NO_x, POC, SO_2 and PM10 emissions; provide emission offsets for NO_x and POC; and implement a PM10 Mitigation Plan to mitigate potential impacts from PM10 and PM10 precursors. These mitigation measures, in staff's opinion, will reduce all potential impacts to a level of insignificance.

Staff recommends the inclusion of four additional Conditions of Certification (AQ-SC1, -SC2, -SC3 and AQ-SC4) to address the construction related impacts. Staff also recommends seven additional conditions, AQ-47 through AQ-53, to ensure compliance with the cooling tower emissions assumptions made in this analysis. Staff recommends the certification of the LECEF with the following proposed Conditions of Certification.

PROPOSED CONDITIONS OF CERTIFICATION

The following section replaces the **PROPOSED CONDITIONS OF CERTIFICATION** found on **pages 4.1-31 through 4.1-45** of the SA.

AQ-SC1 Prior to breaking ground at the project site, the project owner shall prepare a Fugitive Dust Mitigation Plan that will specifically identify fugitive dust mitigation measures that will be employed for the construction of the Los Esteros Critical Energy Facility and related facilities. The Fugitive Dust Mitigation Plan shall specifically identify measures to limit fugitive dust emissions from construction of the project site and linear facilities. Measures that should be addressed include the following:

1. the identification of the employee parking area(s) and the surface composition of those parking area(s);
2. the frequency of watering of unpaved roads and disturbed areas;
3. the application of chemical dust suppressants;
4. the use of gravel in high traffic areas;
5. the use of paved access aprons;
6. the use of posted speed limit signs;
7. the use of wheel washing areas prior to large trucks leaving the project site;
8. The methods that will be used to clean up mud and dirt that has been tracked-out from the project site onto public roads;
9. The use of windbreaks at appropriate locations;
10. The suspension of all earth moving activities under windy conditions; and
11. The use of on-site monitoring devices.

Verification: At least 15 days prior to breaking ground at the project site, the project owner shall provide the CEC Compliance Project Manager (CPM) with a copy of the Fugitive Dust Mitigation Plan (FDMP) for approval. Ground breaking shall not commence until the project owner receives written approval of the FDMP from the CPM.

AQ-SC2 The project owner shall mitigate, to the extent practical, construction related emission impacts from off-road, diesel-fired construction equipment. Available measures which may be used to mitigate construction impacts include the following:

- Catalyzed Diesel Particulate Filters (CDPF);
- Ultra-Low-Sulfur Diesel fuel, with a sulfur content of 15 ppm or less (ULSD);
- Diesel engines certified to EPA and CARB 1996 or newer off-road equipment emission standards.

Additionally, the project owner shall restrict idle time, to the extent practical, to no more than 10 minutes.

The use of each mitigation measure is to be determined in advance by a Construction Mitigation Manager (CMM), who will be available at the project site(s). The CMM must be approved by the CPM prior to the submission of any reports.

The CMM shall submit the following reports to the CPM for approval:

- Construction Mitigation Plan
- Reports of Change and Mitigation Implementation
- Reports of Emergency Termination of Mitigation, as necessary

Diesel Construction Equipment Mitigation Plan

The Construction Mitigation Plan shall be submitted to the CPM for approval prior to rough grading on the project site, and must include the following:

1. A list of all diesel fueled, off-road, stationary or portable construction-related equipment to be used either on the project construction site or the construction sites of the related linear facilities. Equipment used less than a total of 10 consecutive days need not be included in this list.

2. Each piece of construction equipment listed under item (1) must demonstrate compliance with the following mitigation requirements:

Engine Size (BHP)	1996 CARB or EPA Certified Engine	Required Mitigation
< or =100	Yes or No	ULSD
>100	Yes	ULSD
>100	No	ULSD and CDPF, if suitable as determined by the CMM

3. If compliance cannot be demonstrated as specified under item (2), then the project owner may appeal for relief to the CPM. However, the owner must demonstrate that they have made a good faith effort to comply as specified under item (2).

Report of Change and Mitigation Implementation

Following the initiation of construction activities, and if changes to mitigation measures are necessary, the CMM shall submit a Report of Change and Mitigation Implementation to the CPM for approval. This report must contain at a minimum the cause of any deviation from the Construction Mitigation Plan, and verification of any Construction Mitigation Plan measures that were implemented.

The following is acceptable proof of compliance, other methods of proof of compliance must be approved by the CPM.

1. EPA or CARB 1996 off-road equipment emission standards:
    a. A copy of the certificate from EPA or CARB.

2. Purchase and use of ultra-low-sulfur fuel (15 ppm or less).
    a. Receipt or other documentation indicating type and amount of fuel purchased, from whom, where delivered and on what date; and

    b. A copy of the text included in the contract agreement with all contractors and sub-contractors for use of the ultra-low-sulfur fuel in diesel burning construction equipment as identified in the Construction Mitigation Plan.

3. Installation of CDPF:
    a. The suitability of the use of CDPFs is to be determined by a qualified mechanic or engineer who must submit a report to the CPM for approval.

    b. Installation is to be verified by a qualified mechanic or engineer.

4. Construction equipment engine idle time:
    a. A copy of the text included in the contract agreement with all contractors and sub-contractors to keep engine idle time to 10 minutes or less to the extent practical.

Report of Emergency Termination of Mitigation

If a specific mitigation measure is determined to be detrimental to a piece of construction equipment or is determined to be causing significant delays in the construction schedule of the project or the associated linear facilities, the mitigation measure may be terminated immediately. However, notification containing an explanation for the cause of the termination must be sent to the CPM for approval. All such causes are restricted to one of the following justifications and must be identified in any Report of Emergency Termination of Mitigation.

1. The measure is excessively reducing normal availability of the construction equipment due to increased downtime for maintenance, and/or power output due to an excessive increase in back pressure.
2. The measure is causing or is reasonably expected to cause significant engine damage.

3. The measure is causing or is reasonably expected to cause a significant risk to nearby workers or the public.

4. Any other seriously detrimental cause which has approval by the CPM prior to the change being implemented.

Verification: The project owner will submit to the CPM for approval the qualifications of the CMM at least 15 days prior to the due date for the Diesel Construction Equipment Mitigation Plan. The project owner will submit the Diesel Construction Equipment Mitigation Plan to the CPM for approval 10 calendar days prior to rough grading on the project site or start of construction on any associated linear facilities. The project owner will submit the Report of Change and Mitigation Implementation to the CPM for approval no later than 10 working days following the use of the specific construction equipment on either the project site or the associated linear facilities. The project owner will submit a Report of Emergency Termination of Mitigation to the CPM for approval, as required, no later than 10 working days following the termination of the identified mitigation measure. The CPM will monitor the approval of all reports submitted by the project owner in consultation with CARB, limiting the review time for any one report to no more than 20 working days.

AQ-SC3 The project owner shall require as a condition of its construction contracts that all contractors/subcontractors ensure that all heavy earthmoving equipment, including but not limited to bulldozers, backhoes, compactors, loaders, motor graders, trenchers, cranes, dump trucks and other heavy duty construction related trucks, have been properly maintained and the engines tuned to the engine manufacturer's specifications. The project owner shall further require as a condition of its construction contracts, that all heavy construction equipment shall not remain running at idle for more than five minutes, to the extent practical.

Verification: The project owner shall submit to the CPM, via the Monthly Compliance Report, a list of all heavy equipment used on site during that month including the owner of that equipment responsible for its maintenance and a letter from each owner indicating that the heavy equipment in question is properly maintained and tuned to manufacturer's specifications. The project owner shall maintain construction contracts on-site for six months following the start of commercial operation.

AQ-~~SC4~~ ~~The project owner shall provide to the BAAQMD the sum of $510,362 to fund PM_{10} mitigation. The project owner shall provide the necessary funds to the BAAQMD to account for overhead and administrative costs that will occur for the BAAQMD to manage and implement the PM_{10} mitigation program. The applicant shall prepare a PM_{10} Mitigation Plan detailing how the funds shall be distributed and managed. The PM_{10} Mitigation Plan shall contain a detailed list of all mitigation opportunities, including at a minimum the following information for each mitigation opportunity:~~

~~1. A detailed description, including location;~~

~~2. An estimate of the quantity of all criteria pollutant reductions;~~

~~3. An estimated total cost;~~

~~4. A proposed schedule;~~

~~5. The name, address and phone number of a primary contact person;~~

~~6. Any additional information deemed pertinent (e.g. correspondence with the owner of the facility or equipment).~~

~~Full implementation (actual PM_{10} emission reductions) of the final PM_{10} Mitigation Plan must be completed within one year of the start of the Initial Commissioning Phase of the LECEF.~~

~~**Verification:** At least 30 days prior to the start of construction, the applicant shall submit a PM_{10} Mitigation Plan to the CPM for review and approval. The PM_{10} Mitigation Plan shall be approved by the CPM prior to the start of construction. The project owner shall submit quarterly progress reports of the implementation of the PM_{10} mitigation measures.~~

AQ-SC4 The project owner shall provide emission reductions sufficient to mitigate the project PM10 emissions of 44,238 lbs/year from October through March. This mitigation shall preferably be combustion sources within CPM approved proximity of the project site. This mitigation will be preferably targeted for the months of October through March of each year. This mitigation must be surplus, quantifiable, enforceable and permanent as defined by the Federal Emission Banking Requirements. This mitigation shall be approved by the CPM in total and initiated prior to first fire and must be fully realized prior to the second year of operation. This mitigation shall be developed from the following sources in order of preference:

1. The Bay Area Air Quality Management District, Wood Stove Retrofit or Replacement Program.

2. The California Air Resources Board, Lower-Emission School Bus Program.

3. Other combustion related mitigation measures approved by the CPM via written CEC Air Quality Staff review.

4. The California Air Resources Board, Carl Moyer Diesel Engine Replacement Program.

5. Emission Reduction Credits banked with the Bay Area Air Quality Management District and approved by the CPM via written CEC Air Quality Staff review.

Verification: At least 15 days prior to first fire the project owner shall submit to the CPM for approval, a complete description of the full mitigation strategy, including contacts, dollars to be spent, expected delivery dates, monitoring strategies (if necessary) and expected amounts of emission reductions. Periodic reports shall be required as deemed reasonable by the CPM for individual emission reduction sources.

AQ-1 The owner/operator of the Los Esteros Critical Energy Facility shall minimize emissions of carbon monoxide and nitrogen oxides from S-1, S-2, S-3 and S-4 Gas Turbine to the maximum extent possible during the commissioning period. Conditions **AQ-1** through **AQ-11** shall only apply during the commissioning period.

Verification: The project owner/operator shall specifically demonstrate compliance with this Condition of Certification through the Verifications of Conditions of Certification **AQ-5** and **AQ-10**.

AQ-2 At the earliest feasible opportunity in accordance with the recommendations of the equipment manufacturers and the construction contractor, the S-1, S-2, S-3 and S-4 Gas Turbine combustors shall be tuned to minimize the emissions of carbon monoxide and nitrogen oxides.

Verification: The project owner/operator shall specifically demonstrate compliance with this Condition of Certification through the Verifications of Conditions of Certification **AQ-5** and **AQ-10**.

AQ-3 At the earliest feasible opportunity in accordance with the recommendations of the equipment manufacturers and the construction contractor, the SCR Systems (A-2, A-4, A-6 & A-8) and OC Systems (A-1, A-3, A-5 & A-7) shall be installed, adjusted, and operated to minimize the emissions of nitrogen oxides and carbon monoxide from S-1, S-2, S-3 and S-4 Gas Turbine.

Verification: The project owner/operator shall specifically demonstrate compliance with this Condition of Certification through the Verifications of Conditions of Certification **AQ-5** and **AQ-10**.

AQ-4 Coincident with the steady-state operation of SCR Systems (A-2, A-4, A-6 & A-8) and OC Systems (A-1, A-3, A-5 & A-7) pursuant to **AQ-3** the Gas Turbine (S-1, S-2, S-3 and S-4) shall comply with the NO_x and CO emission limitations specified in Conditions **AQ-19a** and **AQ-19c**.

Verification: The project owner/operator shall specifically demonstrate compliance with this Condition of Certification through the Verifications of Conditions of Certification **AQ-5** and **AQ-10**.

AQ-5 The owner/operator of the Los Esteros Critical Energy Facility shall submit a plan to the District Permit Services Division and the CPM for approval at least two weeks prior to first firing of S-1, S-2, S-3 and S-4 Gas Turbines describing the procedures to be followed during the commissioning of the Gas Turbines. The plan shall include a description of each commissioning activity, the

anticipated duration of each activity in hours, and the purpose of the activity. The activities described shall include, but not be limited to, the tuning of the water injection, the installation and operation of the required emission control systems, the installation, calibration, and testing of the CO and NO_x continuous emission monitors, and any activities requiring the firing of the Gas Turbines (S-1, S-2, S-3 and S-4) without abatement by their respective SCR Systems. The Gas Turbines (S-1, S-2, S-3 and S-4) shall be fired no sooner than fourteen days after the District receives the Commissioning Plan.

Verification: The project owner/operator shall submit a Commissioning Plan to the District Permit Services Division and the CPM for approval at least two weeks prior to first fire of S-1, S-2, S-3 and S-4.

AQ-6 During the commissioning period, the owner/operator of the Los Esteros Critical Energy Facility shall demonstrate compliance with conditions **AQ-8** through **AQ-10** through the use of properly operated and maintained continuous emission monitors and data recorders for the following parameters:

a. firing hours

b. fuel flow rates

c. stack gas nitrogen oxide emission concentrations

d. stack gas carbon monoxide emission concentrations

e. stack gas oxygen concentrations

The monitored parameters shall be recorded at least once every 15 minutes (excluding normal calibration periods or when the monitored source is not in operation) for the S-1, S-2, S-3 and S-4 Gas Turbines. The owner/operator shall use District-approved methods to calculate heat input rates, nitrogen dioxide mass emission rates, carbon monoxide mass emission rates, and NO_x and CO emission concentrations, summarized for each clock hour and each calendar day. All records shall be retained on site for at least five years from the date of entry and made available to District or Commission personnel upon request.

Verification: The project owner/operator shall specifically include the installation of the monitors required by this Condition of Certification through the Verifications of Conditions of Certification **AQ-5** and **AQ-10**.

AQ-7 The District-approved continuous monitors specified in condition **AQ-6** shall be installed, calibrated, and operational prior to first firing of the S-1, S-2, S-3 and S-4 Gas Turbine. After first firing of the turbine, the detection range of these continuous emission monitors shall be adjusted as necessary to accurately measure the resulting range of CO and NO_x emission

concentrations. The type, specifications, and location of these monitors shall be subject to District review and approval.

Verification: The project owner/operator shall notify the District and CPM of the date of expected first fire at least 30 days prior to first fire and shall make the project site available for inspection if desired by either the District or CPM.

AQ-8 The number of firing hours of S-1, S-2, S-3 and S-4 Gas Turbines without abatement by SCR or CO Systems shall not exceed 100 hours during the commissioning period. Such operation of the S-1, S-2, S-3 and S-4 Gas Turbine without abatement shall be limited to discrete commissioning activities that can only be properly executed without the SCR or CO system in place. Upon completion of these activities, the owner/operator shall provide written notice to the District Permit Services and Enforcement Divisions and the unused balance of the 100 firing hours without abatement shall expire.

Verification: The project owner/operator shall specifically demonstrate compliance with this Condition of Certification through the Verification of Condition of Certification **AQ-10**.

AQ-9 The total mass emissions of nitrogen oxides, carbon monoxide, precursor organic compounds, PM_{10}, and sulfur dioxide that are emitted by the S-1, S-2, S-3 and S-4 Gas Turbine during the commissioning period shall accrue towards the consecutive twelve-month emission limitations specified in condition **AQ-22**.

Verification: The project owner/operator shall specifically demonstrate compliance with this Condition of Certification through the Verification of Condition of Certification **AQ-10**.

AQ-10 The pollutant mass emissions from the S-1, S-2, S-3 and S-4 Gas Turbine shall not exceed the following limits during the commissioning period. These emission limits shall include emissions resulting from the start-up and shutdown of the S-1, S-2, S-3 and S-4 Gas Turbine.

Pollutant	Without Catalyst		With Catalyst	
	lbs/day	lbs/hr	lbs/day	lbs/hr
NOx (as NO_2)	1224	102	410	34.2
CO	1056	88	300	25
POC (as CH_4)	114	-	114	-
PM_{10}	240	-	240	-
SO_2	32	-	32	-

Verification: The project owner/operator shall submit to the CPM for approval, a monthly emissions report that includes fuel use, turbine operation, post combustion control operation, ammonia use and CEM readings on an hourly and daily basis.

AQ-11 Within 60 days of startup, the Owner/Operator shall conduct a District approved source test using external continuous emission monitors to determine compliance with condition **AQ-10**. The source test shall determine NO_x, CO, and POC emissions during start-up and shutdown of the gas turbines. The POC emissions shall be analyzed for methane and ethane to account for the presence of unburned natural gas. The source test shall include a minimum of three start-up and three shutdown periods. Thirty days before the execution of the source tests, the Owner/Operator shall submit to the District and the CPM for approval**,** a detailed source test plan designed to satisfy the requirements of this condition. The Owner/Operator shall be notified of any necessary modifications to the plan within 20 working days of receipt of the plan; otherwise, the plan shall be deemed approved by both the District and CPM. The Owner/Operator shall incorporate the District and CPM comments into the test plan. The Owner/Operator shall notify the District and CPM within 10 days prior to the planned source testing date. Source test results shall be submitted to the District and CPM within 30 days of the source testing date. These results can be used to satisfy applicable source testing requirements in condition **AQ-26** below.

Verification: The project owner/operator shall specifically include the source testing as required by this Condition of Certification through the Verification of Condition of Certification **AQ-5**. The project owner/operator shall submit the source test plan and results as required in the time frames indicated in this Condition of Certification.

OPERATIONS CONDITIONS OF CERTIFICATION

AQ-12 Consistency with Analyses: Operation of this equipment shall be conducted in accordance with all information submitted with the application (and supplements thereof) and the analyses under which this permit is issued unless otherwise noted below.

Verification: This Condition of Certification shall be verified in the quarterly reports required under Condition of Certification **AQ-34**.

AQ-13 Conflicts Between Conditions: In the event that any condition herein is determined to be in conflict with any other condition contained herein, then, if principles of law do not provide to the contrary, the condition most protective of air quality and public health and safety shall prevail to the extent feasible. All such conflicts must be reported as they are discovered to the CPM.

Verification: This Condition of Certification shall be verified in the quarterly reports required under Condition of Certification **AQ-34** and as needed on an interim basis.

AQ-15 Access to Records and Facilities: As to any condition that requires for its effective enforcement the inspection of records or facilities by representatives of the District, the Air Resources Board (ARB), the U.S. Environmental Protection Agency (U.S. EPA), or the California Energy Commission (CEC), the owner/operator shall make such records available or provide access to

such facilities upon notice from representatives of the District, ARB, U.S. EPA, or CEC. Access shall mean access consistent with California Health and Safety Code Section 41510 and Clean Air Act Section 114A.

Verification: The owner/operator shall maintain records for a minimum of five (5) years and provide access to records and facilities as requested by the CARB, EPA, District and CEC.

AQ-16 Notification of Commencement of Operation: The owner/operator shall notify the District and CPM of the date of anticipated commencement of turbine operation not less than 10 days prior to such date. Temporary operations under this permit are granted consistent with the District's rules and regulations.

Verification: The owner/operators shall notify the District and CPM of the date of anticipated commencement of turbine operation not less than 10 days prior to such date.

AQ-17 Operations: The gas turbine, emissions controls, CEMS and associated equipment shall be properly maintained and kept in good operating condition at all times when the equipment is in operation.

Verification: The owner/operators shall make access available to the facility and records upon request as set forth in Condition of Certification **AQ-15**.

AQ-18 Visible Emissions: No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark or darker than Ringelmann 1 or equivalent 20 percent opacity.

Verification: The owner/operators shall make access available to the facility and records upon request as set forth in Condition of Certification **AQ-15**.

AQ-19 Emissions Limits:

a. Oxides of nitrogen (NO_x) emissions from the gas turbine shall not exceed 5.0 ppmvd @ 15 percent O_2 (three-hour rolling average), except during periods of startup and shutdown as defined in this permit. The total NOx emissions from the exhaust emission stacks associated with gas turbines S-1, S-2, S-3 and S-4 shall not exceed 34.20 lbs in any one clock hour, excluding those hours in which a startup or shutdown has occurred. The NO_x emission concentration shall be verified by a District-approved continuous emission monitoring system (CEMS) and during any required source test. (basis: BACT)

b. Ammonia emissions from the gas turbine shall not exceed 10 ppmvd @ 15 percent O_2 (one-hour rolling average), except during periods of startup and shutdown as defined in this permit. The ammonia emission concentration shall be verified by the continuous recording of the ratio of

the ammonia injection rate to the NO_x inlet rate into the SCR control system (molar ratio). The maximum allowable NH_3/NO_x molar ratio shall be determined during any required source test, and shall not be exceeded until reestablished through another valid source test. (basis: BACT)

c. Carbon monoxide (CO) emissions from the gas turbine shall not exceed 4 ppmvd @ 15 percent O_2 (three-hour rolling average), except during periods of startup and shutdown as defined in this permit. The CO emission concentration shall be verified by a District-approved CEMS and during any required source test. (basis: BACT)

d. Precursor organic compound (POC) emissions from the gas turbine shall not exceed 2 ppmvd @ 15 percent O_2 (one-hour rolling average), except during periods of startup and shutdown as defined in this permit. The POC emission concentration shall be verified during any required source test. (basis: BACT)

e. Particulate matter emissions less than ten microns in diameter (PM10) from the gas turbine shall not exceed 2.5 pounds per hour, except during periods of startup and shutdown as defined in this permit. The PM10 mass emission rate shall be verified during any required source test. (basis: BACT & cumulative increase)

f. Oxides of sulfur emissions (SO_x) from the gas turbine shall not exceed 0.33 pounds per hour, except during periods of startup and shutdown as defined in this permit. The SO_x emission rate shall be verified during any required source test. (basis: BACT & cumulative increase)

Verification: The project owner/operator shall verify all emission limits specified in this Condition of Certification as part of each quarterly report required in Condition of Certification **AQ-34**

AQ-20 Turbine Startup: Startup of the gas turbine shall not exceed a time period of 60 minutes each per occurrence, or another time period based on good engineering practice and approved in advance by the District. The startup clock begins with the turbine's initial firing and continues until the unit meets the emission concentration limits. (Basis: Cumulative increase)

Verification: The project owner/operator shall identify the occurrence of any startup as part of the quarterly report required in Condition of Certification **AQ-34**.

AQ-21 Turbine Shutdown: Shutdown of the gas turbine shall not exceed a time period of 30 minutes each per occurrence, or another time period based on good engineering practice and approved in advance by the District. Shutdown begins with initiation of the turbine shutdown sequence and ends with the cessation of turbine firing. (Basis: Cumulative increase)

Verification: The project owner/operator shall identify the occurrence of any shutdown as part of the quarterly report required in Condition of Certification **AQ-34**.

AQ-22 Mass Emission Limits: Total mass emissions from the exhaust emission stacks associated with S-1, S-2, S-3 and S-4 Gas Turbine shall not exceed the daily, and annual mass emission limits listed in Table 1 below.

Table 1 – Mass Emission Limits (Including Startups and Shutdowns)

Pollutant	Each turbine lb./day	Daily (4 units) (lb.)	Annual (tons)
NOx (as NO_2)	205.2	821	74.9
POC	28.3	113	20.8
CO	99.8	399	72.9
SOx (as SO_2)	7.9	32	5.8
PM_{10}	60.0	240	43.8
NH_3	151.7	607	110.7

The daily mass limits are on a Calendar Day basis as defined under Permit Conditions. The Annual Mass Limit is based on a rolling 8760-hour period ending on the last hour. Compliance shall be based on calendar average one-hour readings through the use of process monitors (e.g., fuel use meters), CEMS, and source test results; and the monitoring, record keeping and reporting conditions of this permit. If any part of the CEM, involved in the mass emission calculations, is inoperative for more then three hours of plant operation, the mass data for the inoperative period shall be calculated using a District approved Alternate Calculation. (Basis: Cumulative increase & record keeping)

Verification: The project owner/operator shall verify all emission limits in this Condition of Certification as part of the quarterly report required in Condition of Certification **AQ-34**.

AQ-23 Acid Limit: The sulfuric acid emissions (SAM) from S-1 through S-4 combined shall not exceed seven tons in any consecutive four quarters. (Basis: PSD)

Verification: The project owner/operator shall verify all emission limits in this Condition of Certification as part of the quarterly report required in Condition of Certification **AQ-34**.

AQ-24 Operational Limits: In order to comply with the emission limits of this rule, the owner/operator shall comply with the following operational limits:

a. The heat input to any gas turbine shall not exceed:

b. Hourly: 472.6 MMBtu/hr
Daily: 11,342 MMBtu/day
Four Turbines
Annual: 16,560,000 MMBtu/year

c. Only PUC Quality natural gas (General Order 58-a) shall be used to fire the gas turbine. The natural gas shall not contain total sulfur in concentrations exceeding 0.25 gr./100 scf.

d. The owner/operator of the gas turbine shall comply with the daily and annual emission limits listed in **Table 1** by keeping running totals based on CEM data. (Basis: Cumulative increase)

Verification: The project owner/operator shall verify all limits in this Condition of Certification as part of the quarterly report required in Condition of Certification **AQ-34**.

AQ-25 Monitoring Requirements: The owner/operator shall comply with the following monitoring requirements for each gas turbine:

a. The gas turbine exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods.

b. The ammonia injection system shall be equipped with an operational ammonia flowmeter and injection pressure indicator accurate to plus or minus five percent at full scale and calibrated once every twelve months.

c. The gas turbine exhaust shall be equipped with continuously recording emissions monitor(s) for NO_x, CO and O_2. Continuous emissions monitors shall comply with the requirements of 40 CFR Part 60, Appendices B and F, and 40 CFR Part 75, and shall be capable of monitoring concentrations and mass emissions during normal operating conditions and during startups and shutdowns.

d. The fuel heat input rate shall be continuously recorded using District-approved fuel flow meters along with quarterly fuel compositional analyses for the fuel's higher heating value (wet basis).

e. The total sulfur content of the fuel gas shall be analyzed on a quarterly basis. (Basis: Monitoring & record keeping)

Verification: The owner/operators shall make access available to the facility and records upon request as set forth in Condition of Certification **AQ-15**.

AQ-26 Source Testing/RATA: Within 60 days after startup of the gas turbines, and at a minimum on an annual basis thereafter, a relative accuracy test audit (RATA) must be performed on the CEMS in accordance with 40 CFR Part 60 Appendix B Performance Specifications and a source test shall be performed. Additional source testing may be required at the discretion of the District or Energy Commission to address or ascertain compliance with the requirements of this permit. The written test results of the source tests shall be provided to the District and CPM within thirty days after testing. A complete test protocol shall be submitted to the District and CPM no later than 30 days prior to testing, and notification to the District and CPM at least ten days prior to the actual date of testing shall be provided so that a District or Energy Commission observer may be present. The source test protocol shall comply with the following: measurements of NO_x, CO, POC, and stack gas oxygen content shall be conducted in accordance with ARB Test Method 100; measurements of PM_{10} shall be conducted in accordance with ARB Test Method 5; and measurements of ammonia shall be conducted in accordance with Bay Area Air Quality Management District test method ST-1B. Alternative test methods, and source testing scope, may also be used to address the source testing requirements of the permit if approved in advance by the District and CPM. The initial and annual source tests shall include those parameters specified in the approved test protocol, and shall at a minimum include the following:

a. NO_x– ppmvd at 15 percent O_2 and LB/MMBtu (as NO_2);

b. Ammonia – ppmvd at 15 percent O2 (Exhaust);

c. CO – ppmvd at 15 percent O2 and LB/MMBtu (Exhaust);

d. POC – ppmvd at 15 percent O2 and LB/MMBtu (Exhaust);

e. PM10 – LB/hr (Exhaust);

f. SO_x – LB/hr (Exhaust);

g. Natural gas consumption, fuel High Heating Value (HHV), and total fuel sulfur content;

h. Turbine load in megawatts;

i. Stack gas flow rate (SDCFM) calculated according to procedures in U.S. EPA Method 19.

j. Exhaust gas temperature (°F)

k. Ammonia injection rate (LB/hr or moles/hr)
(Basis: source test requirements & monitoring)

Verification: The owner/operator shall submit to the District and the CPM for approval a RATA within 60 days after first fire and annually thereafter. The owner/operator submit to the District and the CPM for approval a source test protocol at least 30 days prior to the date of the source test. The owner/operator shall notify the District and the CPM of the date of the source test no later than 10 days prior the testing

date. The owner/operator shall submit to the District and the CPM for approval the results of the source test no later than 30 days following the date of the source test.

AQ-27 Within 60 days of start-up of the LECEF and on a semi-annual basis thereafter, the owner/operator shall conduct a District approved source test on exhaust points for S-1 through S-4 while each Gas Turbine is operating at maximum load to demonstrate compliance with the SAM levels in **AQ-23**. The owner/operator shall test for (as a minimum) SO_2, SO_3 and SAM. After acquiring one year of source test data on these units, the owner/operator may petition the District to switch to annual source testing if test variability is low. (Basis: PSD Avoidance, SAM Periodic Monitoring)

Verification: The project owner/operator shall verify all emission limits in this Condition of Certification as part of the quarterly report required in Condition of Certification **AQ-34**.

AQ-28 A written quality assurance program must be established in accordance with 40 CFR Part 75, Appendix B and 40 CFR Part 60 Appendix F. (Basis: continuous emission monitoring)

Verification: The owner/operators shall make access available to the facility and records upon request as set forth in Condition of Certification **AQ-15**.

AQ-29 The owner/operator shall comply with the applicable requirements of 40 CFR Part 60 Subpart GG. (Basis: NSPS)

Verification: The owner/operators shall make access available to the facility and records upon request as set forth in Condition of Certification **AQ-15**.

AQ-30 The owner/operator shall notify the District and the CPM of any breakdown condition consistent with the District's breakdown regulations. (Basis: Regulation 1-208)

Verification: The project owner/operator shall notify the CPM and the District of all breakdowns as required and include all break down reports as part of the quarterly report required in Condition of Certification **AQ-34**.

AQ-31 The District and the CPM shall be notified in writing in a timeframe consistent with the District's breakdown regulations following the correction of any breakdown condition. The breakdown condition shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the actions taken to restore normal operations. (Basis: Regulation 1-208)

Verification: The project owner/operator shall notify the CPM and the District of all breakdowns as required and include all break down reports as part of the quarterly report required in Condition of Certification **AQ-34**.

AQ-32 Record Keeping: The owner/operator shall maintain the following records:

a. hourly, daily, quarterly and annual quantity of fuel used and corresponding heat input rates;

b. the date and time of each occurrence, duration, and type of any startup, shutdown, or malfunction along with the resulting mass emissions during such time period;

c. emission measurements from all source testing, RATAs and fuel analyses;

d. daily, quarterly and annual hours of operation;

e. hourly records of NO_x and CO, emission concentrations and hourly ammonia injection rates and ammonia/NO_x ratio.

f. for the continuous emissions monitoring system; performance testing, evaluations, calibrations, checks, maintenance, adjustments, and any period of non-operation of any continuous emissions monitor. (Basis: record keeping)

Verification: The owner/operators shall make access available to the facility and records upon request as set forth in Condition of Certification **AQ-15**.

AQ-33 All records required to be maintained by this permit shall be retained by the permittee for a period of five years and shall be made readily available for District inspection upon request. (Basis: record keeping)

Verification: The owner/operators shall make access available to the facility and records upon request as set forth in Condition of Certification **AQ-15**.

AQ-34 Reporting: The owner/operator shall submit to the District and the CPM for approval, a written report for each calendar quarter, within 30 days of the end of the quarter, which shall include:

a. Hourly, daily and quarterly fuel use and corresponding heat input rates;

b. Hourly, daily and quarterly mass emission rates for all criteria pollutants during normal operations and during other periods (startup/shutdown, breakdowns);

c. Time intervals, date, and magnitude of excess emissions;

d. Nature and cause of the excess emission, and corrective actions taken;

e. Time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments;

f. A negative declaration when no excess emissions occurred;

g. Results of quarterly fuel analyses for HHV and total sulfur content. (Basis: record keeping & reporting)

Verification: The owner/operator shall submit to the District and the CPM for approval, written reports for each calendar quarter, within thirty (30) days of the end of the quarter.

AQ-35 Emission Offsets: The owner/operator shall offset the project emissions in the amount and at the ratios outlined in Table 2 below.

Table 2 – Emission Offsets

Pollutant	Emissions Requiring Offsets (tons/yr.)	Offset Ratio	Total ERCs Required (tons/yr.)
NO_x (as NO_2)	75.4	1.15	86.7
POC	21.0	1.00	21.0

The ERC certificates must be delivered to the District and copies to the CPM ten days prior to the issuance of the ATC. (Basis: Emission Offsets)

Verification: The project owner/operator shall submit all necessary ERC certificates to the District and copies to the CPM ten days prior to the issuance of the ATC.

AQ-36 District Operating Permit: The owner/operator shall apply for and obtain all required operating permits from the District according to the requirements of the District's rules and regulations. (Basis: Regulations 2-2 & 2-6)

Verification: The owner/operator shall submit all operating permits required to the CPM in the quarter that they were acquired as part of the quarterly report for Condition of Certification **AQ-34**.

AQ-37 Title IV and Title V Permits: The applications for modification of the Title IV and Title V permits must be delivered to the District prior to first-fire of the turbines. Also the acid rain monitors (Title IV) must be certified within 90 days of first-fire. (Basis: Regulation 2-6)

Verification: The owner/operator shall submit all operating permits required to the CPM in the quarter that they were acquired as part of the quarterly report for Condition of Certification **AQ-34**.

AQ-38 Sunset Provision: Within three years of CEC Approval, The owner/operator must convert to either a combined cycle or cogeneration plant using BACT in effect at the time of conversion. If conversion does not occur the plant must cease operation. (Basis: California State Resources Code, Section 25552)

Verification: Within one year of the date of this Energy Commission decision, the project owner shall submit to the CPM, for review and approval, a schedule for submitting an Application for Certification for conversion of the project to a combined cycle facility employing best available air emissions control technology. Alternatively, within one year of the date of this Energy Commission decision, the project owner shall submit to the CPM, for review and approval, a schedule for submitting a Facility Closure Plan. Either the AFC or the Closure Plan shall be pursued on a schedule that ensures that the project will be either converted to a combined cycle facility or permanently closed within three years of this Energy Commission decision.

AQ-39 The S-5 Fire Pump Engine shall be fired exclusively on diesel fuel having a sulfur content no greater than 0.05 percent by weight. (Toxics, Cumulative Increase)

Verification: The project owner/operator shall include the diesel fuel use of the S-5 fire pump engine as part of the quarterly report required in Condition of Certification **AQ-34**.

AQ-40 The S-5 Fire Pump Engine shall be operated for no more than one hour per day and 100 hours per year for the purpose of reliability testing and non-emergency operation. The testing of S-5 Fire Pump Engine shall not occur on the same day as the testing of S-6 Emergency Generator. (BACT)

Verification: The project owner/operator shall include the operational hours of the S-5 fire pump engine as part of the quarterly report required in Condition of Certification **AQ-34**.

AQ-41 The S-5 Fire Pump Engine shall be equipped with a non-resettable totalizing counter that records hours of operation. (BACT)

Verification: The owner/operators shall make access available to the facility and records upon request as set forth in Condition of Certification **AQ-15**.

AQ-42 The following monthly records shall be maintained in a District-approved log for at least 5 years and shall be made available to the District upon request: (BACT)

a. Total number of hours of operation for S-5.

b. Fuel usage at S-5

Verification: The owner/operators shall make access available to the facility and records upon request as set forth in Condition of Certification **AQ-15**.

AQ-43 The S-6 Emergency Generator shall be fired exclusively on natural gas. (Toxics, Cumulative Increase).

Verification: The project owner/operator shall include the natural gas fuel use of the S-6 emergency generator as part of the quarterly report required in Condition of Certification **AQ-34**.

AQ-44 The S-6 Emergency Generator shall be operated for no more than two hours per day and 100 hours per year for the purpose of reliability testing or in anticipation of imminent emergency conditions. Emergency conditions are: (1) Failure of a regular power supply, or (2) involuntary curtailment of a power supply (where the utility that provides regular power has been instructed by the ISO to shed firm load, or where the utility has actually shed firm load). The testing of S-6 Emergency Generator shall not occur on the same day as the testing of S-5 Fire Pump Engine. (BACT, Cumulative Increase)

Verification: The project owner/operator shall include the operational hours of the S-6 emergency generator as part of the quarterly report required in Condition of Certification **AQ-34**.

AQ-45 The S-6 Emergency Generator shall be equipped with a non-resettable totalizing counter that records hours of operation. (BACT)

Verification: The owner/operators shall make access available to the facility and records upon request as set forth in Condition of Certification **AQ-15**.

AQ-46 The following monthly records shall be maintained in a District-approved log for at least five years and shall be made available to the District upon request: (BACT)

a. Total number of hours of operation for S-6

b. Fuel usage at S-6

Verification: The owner/operators shall make access available to the facility and records upon request as set forth in Condition of Certification **AQ-15**.

AQ-47 The project owner shall submit drift eliminator design details and vendor specific emission justification for the correction factor to be used to correlate blowdown TDS to drift TDS and the amount of drift that stays suspended in the atmosphere in the equation in Condition of Certification **AQ-52** to the CPM for approval.

Verification: Thirty days prior to commencement of construction of the cooling towers, the project owner shall submit the information required above to the CPM for approval.

AQ-48 The project owner shall submit cooling tower design details including the cooling tower type and materials of construction to the CPM for approval at

least 30 days prior to commencement of construction, and at least 90 days before the tower is operated.

Verification: Thirty days prior to commencement of construction of the cooling towers, the project owner shall submit the information required above to the CPM for approval.

AQ-49 No hexavalent chromium containing compounds shall be added to cooling tower circulating water.

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and the Commission per Condition of Certification **AQ-15**.

AQ-50 Drift eliminator drift rate shall not exceed 0.0005 percent.

Verification: The project owner shall submit documentation from the selected cooling tower vendor that verifies the drift efficiency to the CPM for approval 30 days prior to commencement of construction of the cooling towers.

AQ-51 PM10 emission rate shall not exceed 2.16 lb/day.

Verification: Please refer to Condition **AQ-52**.

AQ-52 Compliance with the PM10 daily emission limit shall demonstrated as follows: PM10 lb/day = circulating water recirculation rate * total dissolved solids concentration in the blowdown water * design drift rate * correction factor.

Verification: The project owner shall compile the required daily PM10 emissions data and maintain the data for a period of five years. The project owner shall make the site available for inspection by representatives of the District, CARB and the Commission per Condition of Certification **AQ-15**.

AQ-53 Compliance with PM10 emission limit shall be determined by circulating water sample analysis by independent laboratory within 90 days of initial operation and weekly thereafter.

Verification: The project owner shall compile the required daily PM10 emissions data and maintain the data for a period of five years. The project owner shall make the site available for inspection by representatives of the District, CARB and the Commission per Condition of Certification **AQ-15**.

ACRONYMS (Replaces **ACRONYMS** list on **page 4.1-48** of the SA)

AAQS	Ambient Air Quality Standard
APCO	Air Pollution Control Officer
ARB	(California) Air Resources Board
BAAQMD	Bay Area Air Quality Management District
BACT	Best Available Control Technology
bhp	Brake Horse Power
CARB	California Air Resources Board
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CMM	Construction Mitigation Manager
CO	Carbon Monoxide
CPM	(CEC) Compliance Project Manager
DLN	Dry Low NOx (combustors)
DOC	Determination Of Compliance
ERC	Emission Reduction Credit
FDOC	Final Determination Of Compliance
FDMP	Fugitive Dust Mitigation Plan
gr	Grains (1 gr ° 0.0648 grams)
HRSG	Heat Recovery Steam Generator
ISCST3	Industrial Source Complex Short Term
LECEF	Los Esteros Critical Energy Facility
MW	Megawatts (1,000,000 Watts)
NH_3	Ammonia
NO_2	Nitrogen Dioxide
NO_x	Oxides of Nitrogen
PDOC	Preliminary Determination Of Compliance
PM_{10}	Particulate Mater under 10 microns in diameter
POC	Precursor Organic Compounds
pphm	Parts Per Hundred Million
ppm	Parts Per Million
ppmv	Parts Per Million by Volume
ppmvd	Parts Per Million by Volume, Dry
PSD	Prevention of Significant Deterioration
RATA	Relative Accuracy Test Audit
SA	Staff Assessment (this document)
scf	Standard Cubic Feet
SCR	Selective Catalytic Reduction
SO_2	Sulfur Dioxide
USEPA	United States Environmental Protection Agency

The following **RESOURCES** and **REFERENCES** sections replace those found on **pages 4.1-48 and 4.1-49** of the SA.

RESOURCES FOR FURTHER INFORMATION

California Energy Commission
http://www.energy.ca.gov/

California Energy Commission (Los Esteros Critical Energy Facility Fact Sheet)
http://www.energy.ca.gov/sitingcases/losesteros/index.html

California Energy Commission (Power Projects – An Overview)
http://www.energy.ca.gov/sitingcases/backgrounder.html

California Air Resources Board
http://www.arb.ca.gov/homepage.htm

California Air Resources Board (Air Quality, Emissions, and Modeling)
http://www.arb.ca.gov/html/aqe&m.htm

Bay Area Air Quality Management District
http://www.baaqmd.gov/

REFERENCES

BAAQMD, "Evaluation of the 1995 and 1996 Ozone Seasons (With a Summary of the 1997 Season) in the San Francisco Bay Area, October 1997

BAAQMD, "Preliminary Determination of Compliance Engineering Evaluation Application No. 3213, Los Esteros Critical Energy Facility, Plant #13289", November 2001CARB, "Guidance for Power Plant Siting and Best Available Control Technology", 1999

BAAQMD; Letter from Peter F. Hess, Deputy Air Pollution Control Officer, to Mr. Gabriel Behymer (CEC); Subject: Los Esteros Critical Energy Facility, 01-AFC-12, PM-10 Mitigation; December 26, 2001

BAAQMD, Press Release, "Wood Smoke Reduction Program Yielding Results" February 11, 1998, http://www.baaqmd.gov/pie/press/pr980211.htm

CARB, "California Ambient Air Quality Data 1980-1999 (CD# PTSD-00-014-CD)", Planning and Technical Support Division, Air Quality Data Branch, 2000

CARB, "Emission Reduction Offsets Transaction Cost Summary Report for 2000", March 2001

CARB, “Lower-Emission School Bus Program”, Revised Guidelines Issued: April 2001

CARB, The Carl Moyer Program: Incentives for Cleaner Heavy-Duty Engines, http://www.arb.ca.gov/msprog/moyer/moyer.htm, Last Updated: December 27, 2001

Calpine, Application for Certification: Los Esteros Critical Energy Facility, May 2001

Calpine, Supplement to the AFC for the LECEF, June 2001

Calpine, AFC: LECEF Additional Information, August 2001

Calpine, AFC: LECEF Response to CEC Staff Data Requests, August 2001

National Weather Service, 1961-1990 Normal Monthly Precipitation (California), http://www.nws.mbay.net/ca_pcpn.html

Sierra Research, “PM10 Mitigation Plan, Los Esteros Critical Energy Facility (01-AFC-12),” January 29, 2002

Sierra Research; Letter from Gary Rubenstein to Gabriel Behymer (CEC); Subject: Los Esteros Critical Energy Facility, 01-AFC-12, PM10 Mitigation – Supplemental Information; December 21, 2001

Sierra Research; Letter from Gary Rubenstein to Gabriel Behymer (CEC); Subject: Los Esteros Critical Energy Facility, 01-AFC-12, PM10 Mitigation; December 6, 2001

BIOLOGICAL RESOURCES

Supplemental Testimony of Natasha Nelson and Julie Colyer

This section of the Supplement replaces the Biological Resources Section of the Staff Assessment issued December 31, 2001.

INTRODUCTION

This section provides the California Energy Commission staff's analysis of potential impacts to biological resources from Calpine c*Power's (applicant's) proposal for the construction and operation of the Los Esteros Critical Energy Center (LECEF). This analysis is primarily directed toward impacts to state and federally listed species, species of special concern, wetlands, and other areas of critical biological concern. This document presents information regarding the affected biotic community, the potential environmental impacts associated with the construction and operation of the proposed project, and where necessary, specifies mitigation planning and compensation measures to reduce potential impacts to non-significant levels. This document also determines compliance with applicable laws, ordinances, regulations, and standards (LORS), and specifies conditions of certification.

This analysis is based, in part, on information provided on August 6, 2001, from Calpine's Application For Certification (Calpine c*Power 2001a), Calpine's supplement to Data Adequacy submitted September 14, 2001 (Calpine c*Power 2001b), Calpine's responses to staff's October 10 and 12, 2001, Data Requests submitted on November 1, 16, and 19, 2001, and December 11, 2001 (Calpine c*Power 2001c,d,e), site visits on October 4, November 5 and 21, 2001, pre-demolition surveys (Heady and Frick 2001), a discussion with U.S. Fish and Wildlife Service (USFWS) on September 7, 2001, and a discussion with California Department of Fish and Game (CDFG) on October 18, 2001. The LECEF site has been the subject of two previous Environmental Impact Reports (EIRs). The analyses and mitigation found in the *City of San Jose: U.S. DataPort Draft and Final EIR* (City of San Jose 2000 and 2001) and the *California Public Utilities Commission: Northeast San Jose Reinforcement Project EIR* (CPUC 2000) were used in preparing this testimony. Because of the similarity of the LECEF and the Metcalf Energy Center (MEC) projects, information from the MEC staff analysis and applicant submittals regarding nitrogen deposition and noise impacts were used for this project.

The previous biological resources' analysis of the LECEF (dated December 31, 2001) identified three outstanding Data Requests:

- A complete description of the biological resources along the temporary line from the proposed onsite substation to Zanker Road, and any pull and laydown sites;
- A more complete description of wetland and biological resources on the interior side of the levee wall at Coyote Creek; and
- Information on all population sites of Santa Clara County's listed serpentine plants which may be affected by this project.

The answers to these Data Requests were submitted by the applicant to staff on January 11, 2002 (Calpine c*Power 2002). The edits shown in this supplemental testimony reflect the new data, as well as comments from local agencies (such as City of San Jose) and the applicant at the Staff Assessment Workshop (January 14, 2002). Minor edits for consistency and clarity have also been added.

LAWS, ORDINANCES, REGULATION AND STANDARDS

The applicant will need to abide by the following laws, ordinances, regulations, and standards during project construction and operation.

FEDERAL

Clean Water Act of 1977

Title 33, United States Code, sections 1251-1376, and Code of Federal Regulations, part 30, section 330.5(a)(26), prohibits the discharge of dredged or fill material into the waters of the United States without a permit.

Endangered Species Act of 1973

Title 16, United States Code, section 1531 et seq., and Title 50, code of Federal Regulations, part 17.1 et seq., designate~~s~~ and provide~~s~~ protection of threatened and endangered plant and animal species, and their critical habitat.

Migratory Bird Treaty Act

Title 16, United States Code, sections 703-712, prohibit~~s~~ the take of migratory birds.

STATE

California Endangered Species Act of 1984

Fish and Game Code sections 2050 et seq. protects California's rare, threatened, and endangered species.

Nest or Eggs-Take, Possess, or Destroy

Fish and Game Code section 3503 protects California's birds by making it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird.

Birds of Prey or Eggs-Take, Possess, or Destroy

Fish and Game Code section 3503.5 protects California's birds of prey and their eggs by making it unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird.

Migratory Birds-Take or Possession

Fish and Game Code section 3513 protects California's migratory birds by making it unlawful to take or possess any migratory non-game bird as designated in the Migratory Bird Treaty Act or any part of such migratory non-game bird.

Fully Protected Species

Fish and Game Code sections 3511, 4700, 5050, 5515 prohibit take of animals that are classified as Fully Protected in California.

Significant Natural Areas

Fish and Game Code section 1930 et seq. designates certain areas such as refuges, natural sloughs, riparian areas, and vernal pools as significant wildlife habitat.

Native Plant Protection Act of 1977

Fish and Game Code section 1900 et seq. designates state rare, threatened, and endangered plants.

Streambed Alteration Agreement

Fish and Game Code section 1600 et seq. requires CDFG to review project impacts to waterways, including impacts to vegetation and wildlife from sediment, diversions, and other disturbances.

California Code of Regulations

Title 14, sections 670.2 and 670.5 list animals of California designated as threatened or endangered.

Regional Water Quality Control Board

To verify that the federal Clean Water Act permitted actions comply with state regulations, the project owner possibly will need to get a Section 401 certification from the San Francisco Bay Regional Water Quality Control Board (RWQCB). The Regional Board provides its certification after reviewing the federal Nationwide Permit(s) that is provided by the U.S. Army Corp of Engineers.

LOCAL

Santa Clara County General Plan

Policy R-RC 19 requests that habitat types and biodiversity be maintained and enhanced. Policy R-RC 24 requests that areas of particularly fragile ecological nature necessary for preserving threatened or endangered species receive special consideration for preservation and protection from development impacts. Policy R-RC 37 requests that lands near creeks, streams, and freshwater marshes shall be considered to be in a protected buffer area. Policy R-RC 38 states that buildings, structures, and parking lots are not allowed in the buffers defined in R-RC 37, exceptions being those minor structures required as part of flood control projects.

Santa Clara County Tree Ordinance

NS-1203.107, sections ~~Sec.~~ C16-2(c) and (j), and section ~~Sec.~~ C16-3 define Heritage and ordinance trees and prohibits removal without a permit.

City of San Jose 2020 General Plan

Woodlands, Grasslands, Chaparral, and Scrub Policies

Number 8: Serpentine grasslands should be preserved and protected to the greatest extent feasible or appropriate measures should be taken to restore or compensate.

Bay and Baylands Policies

Number 5: The City should continue to participate in the Santa Clara Valley Non-Point Source Pollution Control Program and meet regional water quality standards implemented through the National Pollution Discharge Elimination System Permits.

Species of Concern Policies

Number 1: Consideration should be given to setting aside conservation areas in the Bay and baylands, along riparian corridors, upland wetlands, and hillside areas to protect habitats of unique, threatened, and endangered species.

Number 2: Habitats that support Species of Concern should be retained to the greatest extent feasible.

Urban Forest Policies

Number 2: Development projects should include the preservation of ordinance-sized trees, and other significant trees.

Number 8: Where urban development occurs adjacent to natural plant communities (e.g. riparian forest), landscape plantings should incorporate tree species native to the area to the greatest extent feasible.

City of San Jose Riparian Corridor Policy

Guideline 1C: Setback Areas

All buildings, other structures, impervious surfaces, outdoor activity areas, and ornamental landscaped areas should be separated a minimum of 100 feet from the edge of the riparian corridor (or top of bank, whichever is greater). Exceptions to the 100-foot setback may be considered for certain circumstances, including utility or equipment installations which involve no significant disturbance to the riparian corridor during construction and operation, and generate only incidental human activity.

Guideline 2C: Visual and Guideline 2E: Lighting

Development projects should be designed to minimize potential impacts to adjacent riparian habitat through the use of environmentally sensitive construction materials/activities, specialized lighting features, and native landscaping.

Guideline 2f: Noise

The operation of mechanical equipment within or adjacent to riparian corridors should not exceed noise levels for open space as specified in the Noise Element of the City of

San Jose's General Plan. Noise producing stationary equipment should be located as far as necessary from riparian corridors to preclude exceeding the ambient noise level in the corridors.

Guideline 6B: Vegetation Removal

Vegetation removal in riparian areas should be performed only for floodway maintenance or to remove undesirable exotic plants. Herbicides should only be used where manual and mechanical methods are infeasible. If vegetation removal is required as a part of project design, tree removal should be reviewed with the City Arborist. A 3:1 habitat replacement ratio is required and revegetation plans should be reviewed by the City.

Guideline 6D: Herbicides

Herbicide use within and adjacent to riparian corridors should be limited to those specifically labeled for use adjacent to water courses.

Guideline 6E: Non-native Plant Removal

Invasive, non-native plants should be removed and replaced with native plants in the portion of the riparian corridor adjacent to the property to be developed.

Guideline 7B: Water Quality/Drainage and Runoff

The direct discharge of industrial effluent into the riparian channel, corridor, or floodplain is prohibited. Runoff from industrial uses should be directed away from direct entry to the riparian corridor, or Best Management Practices should be provided and permanently maintained and on-site retention areas used.

Ordinance-sized Trees and Heritage Trees

City of San Jose Civil Code, Titles 13.28.330-13.28.360 defines and protects Heritage Trees. Title 13.31.010 to 13.32.100 prohibits the removal of trees that are 56 inches or greater at 24 inches above the natural grade or slope without a permit.

Ordinance 26248 - Lighting

City of San Jose Municipal Code (Part 5) states any lighting located adjacent to riparian areas shall be directed downward and away from riparian areas

SETTING

REGIONAL

The proposed LECEF project site is located in Santa Clara County within the Urban Service Area of north San Jose and just west of the town of Milpitas. The 174-acre parcel containing the project site was formally annexed by the City of San Jose in October of 2001, with the entire Urban Service Area proposed for annexation within the year. LECEF is bounded by the Santa Clara Valley to the south, the Diablo Range to the east, the Santa Cruz Mountains to the west and San Francisco Bay to the north.

Existing land use types of Santa Clara County consist of residential, commercial, industrial, agriculture, and open space.

Habitats present in the region are identified as Northern Coastal Salt Marsh, Northern Coastal Brackish Marsh, Seasonal Wetland, Central Coast Cottonwood-Sycamore Riparian Forest, Non-Native Annual Grassland, Alkali Grassland, Agricultural Areas, and Developed Areas.

Marshlands generally occur to the north and west of the project site, transitioning from sewage disposal ponds to salt evaporators, to the marshlands of the bay approximately eight miles northwest of the site. Seasonal wetlands occur along Coyote Creek in a bypass channel and at the upper edges of the marsh zones. Riparian corridors include Coyote Creek and the Guadalupe River. They lie approximately 1,000 feet to the east and approximately two miles west respectively of the proposed LECEF site.

Several plant and animal species listed under state and/or federal Endangered Species Acts are known to inhabit the project region. For a complete list of sensitive species actually observed and with a potential to occur in the proposed project site region, refer to **BIOLOGICAL RESOURCES Table 1** and **Table 2** (respectively), below. Several plant and animal species considered as sensitive or listed under state and/or federal Endangered Species Acts are identified as endemic (restricted) to serpentine soils in Santa Clara County. For a complete list of the serpentine species, refer to **BIOLOGICAL RESOURCES Table 3**, below.

BIOLOGICAL RESOURCES Table 1
Special Status Species found on the LECEF Site and on Contiguous Parcels
(Calpine c*Power 2001a,b,c)

Species Name	Regulatory Status[#]	Suitable Habitat for the Species	Known Occurrence In Project Area*
American wWhite pPelican *Pelecanus erythrothynchos*	CSC	Wetland habitat; fresh and/or brackish; Sloughs, slow moving water, lake	Species observed on the project site.
Loggerhead sShrike *Lanius ludovicianus*	SC, CSC	Annual grassland, Riparian habitat along Coyote Creek	Species observed on the project site. Potential suitable foraging and nesting habitat on site.
Northern hHarrier *Circus cyanus*	CSC	Wetland habitat; fresh and/or brackish, Cropland, Annual grassland	Species observed foraging over project site. ~~Potential s~~Suitable foraging and potential nesting habitat on site.
White-tailed kite *Elanus leucurus*	FP	Annual grassland; Riparian habitat along Coyote Creek	Species observed foraging and nesting adjacent to project site. Potential suitable foraging habitat on site and potential for nesting in trees adjacent to site and within the Coyote Creek riparian corridor.
Western burrowing owl *Athene cunicularia*	SC, CSC	Annual grassland, Oak Woodland	Species known to occur in the vicinity of project site. Potential suitable foraging and nesting habitat on site.
Yuma myotis bat *Myotis yumanensis*	SC, CSC	Riparian habitat along Coyote Creek, Chaparral	Species observed foraging and roosting adjacent to project site. Potential suitable foraging habitat on site and potential for foraging and roosting within the Coyote Creek riparian corridor.

[#] Federal-, state-, and CNPS-listed species:
FE: Federally Endangered.
FT: Federally Threatened.
SC: Federal Species of Concern.
PE: Federal Proposed Endangered.
PT: Federal Proposed Threatened.
C: Candidate Species for Listing
SE: California Endangered.
ST: California Threatened.
CPE: California Proposed Endangered.
CSC: California Species of Special Concern.
FP: California Fully-Protected species.
CR: California Rare.
1A: Extinct.
1B: CNPS rare or endangered in California and elsewhere.
2: CNPS rare or endangered in California, more common elsewhere.

* Prior to demolition of site structures for the U.S. DataPort site preparation (October through December, 2001).

BIOLOGICAL RESOURCES Table 2
Special Status Species Potentially Occurring on the LECEF Site and on Contiguous Parcels*
(Calpine c*Power 2001a,b,c, H.T. Harvey & Associates 2000, and City of San Jose 2001c)

Species Name	Regulatory Status[#]	Suitable Habitat for the Species	Known Occurrence In Project Area*
Plants			
Contra Costa goldfields *Lasthenia conjugens*	1B, FE	Annual grasslands mesic, Vernal pool	Species has been extirpated from most of Santa Clara County. Potentially suitable habitat in the vicinity of the site is highly degraded.
Birds			
White-tailed kite *Elanus leucurus*	SC, FP	Annual grasslands, Riparian habitat along Coyote Creek	Kites have nested along Coyote Creek in adjacent properties. Kites forage over the buffer lands property and may nest in trees along the north edge of the Cilker property.
Western burrowing owl *Athene cunicularia* ssp. *hypugea*	SC, CSC	Annual grasslands	CDFG-protocol level surveys for U.S. DataPort (June 2000) found no sign and the 174 acres appears to be unoccupied. Habitat is consistent with potential nesting and foraging habitat.
Mammals			
Yuma myotis bat *Myotis yumanensis*	SC, CSC	Riparian habitat along Coyote Creek, Chaparral	Potential habitat along Coyote Creek riparian corridor.
Fish			
Fall-run Chinook salmon *Oncorhynchus tshawytscha*	PE	Ocean, Freshwater streams	Migrate from the ocean to spawning sites in Coyote Creek.
Steelhead trout *Oncorhynchus mykiss*	FT	Ocean, Freshwater streams	Migrate from the ocean to spawning sites in Coyote Creek. Adults migrate upstream from January through April and smolts migrate downstream from March through May. Juveniles may remain in deep pools throughout the year.

[#] See footnote for Biological Resources Table 1.

* Prior to demolition of site structures for the U.S. DataPort site preparation (October through December, 2001).

BIOLOGICAL RESOURCES Table 3
Special Status Species found on Serpentine Soils
In Santa Clara County
(USFWS 1998a)

Species	Regulatory Status[#]	Distribution and Life History
Plants		
Santa Clara Valley dudleya *Dudleya setchellii*	FE, 1B	Several occurrences from San Jose south to San Martin (20 km); restricted to rocky outcrops within serpentine grasslands.
Smooth lessingia *Lessingia micradenia var. glabrata*	SC, 1B	Endemic to the east side of the Santa Cruz Mountains in Santa Clara County; grows on serpentine soils or outcrops.
Coyote ceanothus *Ceanothus ferrisae*	FE, 1B	Suitable habitat at Anderson Dam, Kirby Canyon, and Morgan Hill; grows on dry slopes in serpentine chaparral and valley and foothill grasslands below 300 meters.
Metcalf Canyon jewel-flower *Streptanthus albidus ssp. Albidus*	FE, 1B	Occurrences from San Jose south to Anderson Lake (30 km); endemic to serpentine outcrops.
Mt. Hamilton thistle *Cirsium fontinale var. campylon*	SC, 1B	Several occurrences in Santa Clara County and other counties; found in serpentine seeps.
Tiburon paintbrush *Castilleja affinis* ssp. *neglecta*	FE, ST, 1B	Occurs in serpentine bunchgrass communities in Marin, Napa, and Santa Clara counties. Less than 20 plants are in Santa Clara County.
Most beautiful jewel-flower *Streptanthus albidus ssp. Peramoenus*	SC, 1B	On the ridges of Santa Clara County and elsewhere; grows between 140 and 700 meters in elevation on serpentine outcrops or ridges and slopes in chaparral and valley foothill grassland.
Invertebrates		
Opler's longhorn moth *Adela oplerella*	SC	Nine populations in Santa Clara County, but also occurs throughout in the greater San Francisco Bay area. Habitat restricted to its exclusive host plant, California cream cups (*Platystemon californicus*).
Bay checkerspot butterfly *Occidryas editha ssp. bayensis*	FT	Habitat now limited and patchily distributed in several counties; the four core areas on Coyote Ridge provide a reservoir critical to the survival of the Santa Clara County metapopulation; all habitat is on shallow, serpentine-derived or similar soils which support the butterfly's larval food plants.

[#] See footnote for Biological ResourcesTable 1.

Critical Habitat

Early in 2001, the USFWS designated approximately 24,000 acres of habitat in 15 Units within San Mateo and Santa Clara Counties as critical for the survival of the bay checkerspot butterfly (USFWS, 2001c) which depends on host plants growing on serpentine soils. The two closest units to the LECEF are Communications Hills (Unit 6) and Silver Creek (Unit 12). Communications Hills covers 443 acres of mostly undeveloped land and is approximately 6 miles south of LECEF. Although recent surveys have not detected the butterfly on the hill, the USFWS believes this Unit functions as habitat for the butterfly, more precisely it acts as a "stepping stone" to other suitable areas. It also represents the northwestern most remnants in the Santa Clara metapopulation. The City of San Jose specific plan has between 2,500 and 4,000 new residential units, additional commercial activities, parks, and schools proposed within the Communication Hills Unit. The Silver Creek Unit includes nearly 1,000 acres of contiguous serpentine soils, other scattered serpentine outcrops, and habitat less suitable for breeding, but needed for nectar-feeding or dispersal. This Unit is approximately 9 miles southwest of LECEF. The Unit includes the non-profit Silver Creek Preserve owned by William Lyon Homes (formerly Presley Homes). A small population of bay checkerspot butterfly has been documented in the Unit, but some areas are in degraded condition. This is the northernmost Uunit of the Santa Clara metapopulation.

In March 2001, the USFWS designated four million acres of California as critical habitat for the California rRed-legged Frog (USFWS 2001b). The California red-legged frog requires both aquatic and upland habitats. The closest unit to LECEF is Unit 15, about 8-miles to the east. Unit 15 (East Bay-Diablo Range Unit) covers one million acres of watersheds within eight central coast counties. All of Santa Clara County's eastern edge is within Unit 15.

In March 2000, the National Marine Fisheries Service (NMFS) designated critical habitat for chinook salmon and steelhead trout (NMFS 2001). These areas include California rivers (including estuarine areas and tributaries) within the range of each listed Evolutionary Significant Unit (ESU). Chinook salmon and steelhead trout require aquatic, freshwater and saltwater habitats. The closest critical habitat for these species is Coyote Creek, a freshwater habitat, about 1,000 feet to the east of the proposed project site.

Recovery Plans

Fourteen federally listed species and fourteen species of concern are included in the *Recovery Plan for Serpentine Soil Species of the San Francisco Bay Area* (USFWS 1998a). The USFWS Recovery Plan delineates the reasonable actions which are believed to be required to recover and/or protect these species.

The draft recovery plan for the California red-legged frog was released in May 2000 (USFWS 2000). The goals of the plan are to delist the species by protecting known populations and reestablishing others, protecting habitat (core, migrating), and promoting management actions which stop threats.

Habitat Conservation Plans

Construction of about 1,500 homes and a golf course on more than 1,500 acres in the Silver Creek Valley led to the establishment of the Silver Creek Preserve in 1991 (USFWS 2001c). The preserve is owned by William Lyon Homes and is actively managed by the non-profit Silver Creek Preserve. This preserve is now part of USFWS' critical habitat for bay checkerspot butterfly (see Critical Habitat section above).

A regional habitat conservation plan for serpentine soil management is foreseen by USFWS, but no formal plans have been implemented. Shea Homes has deposited $100,000 to an account dedicated to regional conservation of the bay checkerspot butterfly for use at the direction of the USFWS (USFWS 2001c). At one point, Metcalf Energy Project had proposed $50,000 with the same intention.

The PG&E Metcalf-Edenvale/Metcalf-Monte Vista Habitat Conservation Plan (HCP) provided funds for a 10-acre preserve in the Santa Teresa Hills (USFWS 2001c). This preserve is now part of USFWS' critical habitat for bay checkerspot (see section above). This HCP covered temporary and permanent impacts to bay checkerspot butterfly habitat from rewiring of existing lines and the installation of a 4th circuit on existing poles. The HCP gives the permit holder incidental take coverage during construction along these two circuits, and expired in November 2001 (USFWS 1998b).

LOCAL

The property is located north of State Route 237 (Alviso-Milpitas Road), west of ~~Highway~~ Interstate 880, and east of Zanker Road. The proposed LECEF would be located on 18 acres within Calpine's 55-acre property north of downtown San Jose within Santa Clara County. The 55-acre property was used mainly as a plant nursery. It contained several greenhouses and included approximately 10 structures (including trailers, modular structures, and wood framed buildings) used for residential purposes. The property had not been used in several years and open areas were overgrown with tall grasses and non-native weedy species. From October to December 2001, at the City of San Jose's request, all buildings and most of the vegetation was removed, and this left the entire 55-acre parcel (including the 18 acres of the LECEF site) as bare ground. Staff's analysis will cover the pre-demolition and post-demolition impacts.

Current proposals for the remainder of the 55-acre property include the Los Esteros substation proposed by PG&E (analyzed in the *CPUC: Northwest San Jose Reinforcement Project EIR*) to the north and the U.S. DataPort Building 9 (analyzed in *City of San Jose: U.S. DataPort EIR*) to the south. The agricultural lands to the east and north (Cilker property/U.S. DataPort property) of the 55-acre parcel are proposed for development as part of the U.S. DataPort buildout. The San Jose/Santa Clara Water Pollution Control Plant (WPCP) buffer lands to the east are also proposed for the U.S. DataPort buildout. However, at the same time, the City of San Jose has released a Request for Qualifications seeking power generating firms to build and operate power plants on the WPCP's buffer lands to the west of the project site (Calpine c*Power 2001a). Staff has analyzed two build-out scenarios in this analysis. One, construction of the 174 acres for U.S. DataPort, including the west side of the 55-acre parcel.

Second, a future of no U.S. DataPort and all lands remaining in agricultural or buffer land (undeveloped) uses.

The LECEF site is located approximately 750 feet west of the Coyote Creek Flood Control Project. The Flood Control Project, completed in 1997, consists of a levee wall, approximately 10 feet high and approximately 60 feet wide with an access road on top. Directly adjacent to the east, lies the Santa Clara Valley Water District's (SCVWD's) access road. At its closest, the levee is an estimated five feet from the creek's riparian vegetation (near the State Route~~HWY~~ 237 overpass) and at its furthest, approximately 40 feet. At the southern one-third of the Cilker property (U.S. DataPort property), the Coyote Creek riparian corridor borders the in-board side of the levee. Stormwater runoff from the site will be pumped into a storm drain system to ~~an existing 24-inch culvert and flap gate (or~~a new 42-inch ~~a replacement~~ pipe~~)~~ in the levee. There is an existing 24-inch culvert approximately 15 feet south of the proposed 42-inch pipe which is only passively used to drain Cilker lands, and is not currently at capacity. In order to avoid impacts to the SCVWD's access road, the applicant ~~is designing~~has designed a storm drain outfall to the creek channel (proper) approximately 100 feet ~~from~~ east of the levee at an elevation of 11.5 feet. The margin of the high-water mark (the limit of U.S. Army Corps of Engineers jurisdiction) is 10 feet. The construction ~~may be~~will be able to avoid all riparian trees and will place the above ground structure (pipe or concrete riser) on an exposed area of existing rip rap. Construction is scheduled from July 1st to October 15th in order to avoid the bird nesting season and this timeframe would also avoid the fall-run c~~C~~hinook salmon and steelhead trout migration periods. The construction will ~~likely~~ utilize a single construction crew, of approximately six workers, an excavator, and a loader. Existing roads will be used to access the site and act as a staging area. ~~Staff is still awaiting information from the applicant regarding the~~There is no potential for wetlands in the construction area.

Within the flood control levee, Coyote Creek (approximately 1,000 feet from the proposed LECEF site) flows in a rock-sided, low-flow channel north to the South San Francisco Bay. Coyote Creek is an area vegetated with typical native riparian vegetation including Fremont cottonwood, red willow, box elder, coast live oak, arroyo willow, western sycamore, and black walnut. Shrub and herbaceous species throughout the riparian corridor include blue elderberry, mulefat, snowberry, California blackberry, poison oak, mugwort, and wild cucumber. Non-native vegetation present along this reach of the creek include Himalayan blackberry, milk thistle, curly dock, and fumaria. Coyote Creek is a wildlife corridor and contains several hundred species including birds, mammals, amphibians, and reptiles. Several species (including the white-tailed kite, a fully protected species) has the potential to nest in this area.

LECEF is approximately 1 to 1.5 miles south of the Don Edwards (formally San Francisco Bay) National Wildlife Refuge (NWR). This area is a highly productive, diverse and sensitive marsh habitat devoted to the preservation of salt marsh harvest mouse, nesting and migratory shorebirds, upland birds and mammals, and tidal invertebrates. Several bird species that are found in Don Edwards NWR, such as mallard and American coot, may use the LECEF site or adjacent properties as part of their foraging grounds.

Common native bird species observed on the LECEF site and linear routes include the American kestrel, Anna's hummingbird, black phoebe, black-chinned hummingbird, Brewer's blackbird, California towhee, common yellowthroat, lesser goldfinch, mourning dove, northern mockingbird, prairie falcon, red-shouldered hawk, red-tailed hawk, song sparrow, turkey vulture, woodpecker species, western meadowlark, western scrub jay, white-crowned sparrow, and the yellow-rumped warbler. Common native mammals observed include the California ground squirrel and the Yuma myotis bat. For special status species observed and with a potential to be observed on the LECEF site and on contiguous parcels, refer to **BIOLOGICAL RESOURCES Table 1** and **Table 2**, respectively.

Power Plant Site

Prior to demolition and vegetation removal at the request of the City of San Jose, the LECEF site consisted primarily of abandoned living quarters, greenhouses, pesticide storage sheds, a paved road, and parking areas (9.5 acres). Vegetation included agricultural land and agricultural land reverted to disturbed grassland (with ruderal species, 8.5 acres). This habitat was dominated by non-native herbaceous species including mustard, anise, cheeseweed, wild radish, bristly ox-tongue, Italian thistle, charlock, wild radish, harding grass, red foxtail chess, and red-leaf filaree. Construction of the site will result in the permanent loss of 18 acres.

The site was tested for soil quality concerns in July 2000 (Calpine c*Power 2001a) following a Phase I assessment (documents preliminary environmental concerns related to current and historical chemical use) of the property. The evaluation found elevated concentrations of metals and pesticides in the shallow soil. Lead and arsenic concentrations were higher than typical background levels, but well below Total Threshold Limit Concentrations (TTLC). The TTLC is the level above which solid waste is considered hazardous. Concentrations of the pesticide DDT were reported above the 1,000 ppb hazardous waste threshold, but below the EPA's health-based Preliminary Remediation Goal (PRG) of 12,000 ppb. PRG's are chemical concentrations that correspond to fixed levels of risk to human health and are used to screen if the EPA needs further evaluation.

While leaking artesian wells had produced a wetland area to the south of the LECEF site, these were capped during the demolition for U.S. DataPort, and the vegetation removed. There are no wetlands or sensitive plant species on the proposed project site although sensitive wildlife species, such as the loggerhead shrike, northern harrier, burrowing owl, and white-tailed kite have been known to forage either on or in the immediate vicinity of the site. Three mature trees on site were identified as having the potential for nesting by medium sized raptors, but none were observed utilizing them during field surveys (Calpine c*Power 2001c). The loss of any mature tree(s) (see Biological Resources Item E) would result in a temporary impact of nesting and roosting loss for at least five years (the time between the tree removal and the self sufficiency of the replaced trees). There are several potential nesting and roosting trees along the Coyote Creek corridor that may have the same nesting and roosting qualities that could be used in the interim and the removal of the mature trees will have a less than significant impact. One building was occupied by Yuma myotis bats, but this was

demolished at the request of the City of San Jose (Heady and Frick 2001) and is no longer part of the baseline conditions.

Surveys for burrowing owls found that they were not present on the LECEF site (Calpine c*Power 2001a), or on the Cilker property (U.S. DataPort property; H.T. Harvey 2000). The surveys for U.S. DataPort found nearby properties did have sign of nesting birds, including the WPCP's buffer lands (H.T. Harvey 2000). Burrowing owls were observed along the U.S. DataPort proposed potable water line alignment west of Zanker Road and at a burrowing owl relocation area within a bus maintenance facility, just south of State Route~~SR~~ 237 and east of Zanker Road (City of San Jose 2001). The LECEF site and adjacent properties are consistent with potential nesting and foraging habitat for burrowing owls.

The City of San Jose Tree Removal Controls serve to protect all trees having a trunk measuring 56 inches or more in circumference (18 inches in diameter) at the height of 24 inches above the natural grade of slope. The ordinance protects both native and non-native species. The loss of any significant tree(s), which are neither irreversibly diseased, dead, or dying nor are substantially damaged from natural causes requires a removal permit from Santa Clara County and/or the City of San Jose. Several trees on the 55-acre parcel were identified as meeting the criteria of a significant tree, and demolition may have removed several of them. Trees that were removed during the demolition will be permitted under the City of San Jose's Planned Development Permit (see **LAND USE** in this document). ~~The arborist report is currently being validated, so staff's analysis on the number of trees on site may change based on future submittals.~~ For any remaining trees which meet the classification of significant, a permit application must be submitted by the applicant to the City of San Jose.

The City of San Jose Riparian Corridor Policy notes that projects near riparian areas should remove non-native vegetation. The landscaping plan for LECEF would include weed control as part of its prescriptions. Without the build-out of U.S. DataPort, the landscaping at LECEF could reach Coyote Creek and cause potential harm to the community structure. Staff ~~has asked to~~will review the applicant's draft Landscaping Plan prior to construction.

Linear Facilities

Readers should note that some linear facilities to serve the site are shared by the PG&E's Los Esteros substation and U.S. DataPort. The CEC analyses of this application will cover the potential impacts of all linear facilities, regardless of eventual ownership. For the most part, linear facilities for the LECEF project would occur on agricultural land and/or agricultural land reverted to disturbed grassland (with ruderal species).

Transmission Lines

The proposed interconnect to the electrical grid is through the PG&E's Los Esteros substation. In this case, the transmission lines (approximately 220 feet) would be buried underground to connect the LECEF switchyard to PG&E's Los Esteros substation which will abut the north end of the proposed site. These interconnects would be an extremely short point of connection and occur on land already disturbed

during construction of the two facilities. No biological resources would be effected under this scenario. Since it appears likely that LECEF will be constructed prior to the PG&E Los Esteros substation, the existing lines to the south of the site will be used for interconnection to the grid. The interconnection may involve a temporary line being installed ~~along the access road~~next to a dirt road across fallow agricultural land to Zanker Road, temporarily disturbing 3.1 acres. Elements of wetlands plant communities (0.2 acre) were found near the large Fremont cottonwood along the dirt road (H.T. Harvey & Associates 2000, Calpine c*Power 2002). Potential pull sites or staging areas are assumed to be placed on the 55-acre parcel and WPCP bufferlands west of Zanker Road, but the applicant does not have a final design. Staff has assumed the pulldown sites will temporarily disturb two areas outside of the new transmission line's disturbance: 0.1 acre of disturbed grassland habitat and 0.1 acre of agricultural land. ~~Though this alternative was the least preferred according to the applicant, it is the route selected, and for which an alternative interconnect study was completed by PG&E. No biological surveys were supplied by the applicant for this route, and several sensitive areas, including wetlands, were identified as part of the U.S. DataPort baseline (H.T. Harvey & Associates 2000).~~ Installation and reconductoring of transmission lines outside of the temporary connection are not anticipated (see **Transmission System Engineering** in this document).

Storm Water Drain

A new storm water discharge pipe will travel east to west (approximately 750 feet) across the northern boundary of LECEF out to the Flood Control Project levee, and enter Coyote Creek through an existing outfall structure in the levee wall. The pipeline will require the construction of a two-foot wide, one-foot deep trench. The construction right-of-way will temporarily disturb approximately 0.07 acre~~s~~ of agricultural land to the west of the levee and 0.05 acre~~s~~ of ~~riparian/wetland land~~upland floodplain to the east of the levee, for a total temporary impact of 0.12 acre. No ~~P~~permanent disturbance would result because ~~at~~ the above-ground portion of the outfall structure (pipe or concrete riser) will be placed on an area of exposed rip-rap (Calpine c*Power 2002). ~~will remove 0.005 acres of riparian habitat~~. ~~The proposed construction of a flood conveyance pipe and an outfall to the low-flow channel of Coyote Creek is currently being designed by the applicant, so all acreage numbers are approximate.~~

The Coyote Creek flood control channel and surrounding riparian habitat acts as a wildlife corridor and has the potential to provide habitat for several sensitive wildlife species. Sensitive fish species such as the fall-run chinook salmon and steelhead rainbow trout are likely to occur in Coyote Creek during migration to and from spawning sites upstream (see **BIOLOGICAL RESOURCES Table 2**). This riparian corridor also provides a potential breeding habitat for the white-tailed kite and the saltmarsh common yellowthroat. The western pond turtle, found in ponds, marshes, rivers, and streams also has the potential to occur in this area of Coyote Creek. Although surveys in the vicinity of the site have not detected the California red-legged frog, this area provides potential habitat since it is within its historic range (H.T. Harvey 2000).

Natural Gas Line

A new natural gas pipeline (approximately 550 feet) will travel on a north to south axis from the southwest portion of the LECEF project site to the existing natural gas

pipelines near Alviso-Milpitas Road, at the southwest corner of c*Power's property. This pipeline will require the construction of a two-foot wide, one-foot deep trench. Vegetation communities in the natural gas pipeline route include agricultural land and agricultural land reverted to disturbed grassland (with ruderal species). These ~~habitats~~ areas provide potential habitat for several sensitive raptor species mentioned above under the Power Plant section. Significant trees may have to be removed during installation.

Roads

The primary access road (approximately 2,700 feet) will cross west-east from Zanker Road to just north of Alviso-Milpitas Road and State Route 237. The secondary access road (approximately 100 feet) will run north south and connect the primary access road to State Route 237. The emergency access road will cross west to east from Zanker Road and then south to the southwestern portion of the PG&E Los Esteros Substation. Grading and paving the roads will require a construction zone of approximately 80 feet in width, resulting in the permanent loss of five acres. This area contains small trees, agricultural land, and agricultural land reverted to disturbed grassland (with ruderal species). Such habitat has the potential to provide nesting, foraging, and roosting habitat for several raptor species mentioned above under the Power Plant section. The primary access road avoids the wetland delineated for U.S. DataPort (H.T. Harvey & Associates 2000).

Waterlines

LECEF will use reclaimed water from and return wastewater to the WPCP. A new recycled water line (approximately 1,000 feet) and a new wastewater line (approximately 2,700 feet) will run east to west entirely along the northern shoulder of the proposed primary access road. The vegetation and wildlife present are described in the previous section.

Worker Parking and Staging Areas

The worker parking and staging areas will occur in the northwest section the applicant's 55-acre property, and would result in the temporary disturbance of 20 acres. Vegetation communities included agricultural land and/or agricultural land reverted to disturbed grassland (with ruderal species). As a result of the demolition work ordered by the City of San Jose, ~~no~~ only five mature~~significant~~ trees ~~or~~ and no vegetation communities ~~remain~~currently exist on site. Wildlife species include those species that can be found in the Power Plant section.

BIOLOGICAL RESOURCES

ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
BIOLOGICAL RESOURCES -- Would the project or related facilities:				
a) Have an adverse effect, either directly, indirectly, or cumulatively, on any species identified as a candidate, sensitive, or special status species in federal, state, local or regional plans, policies, or regulations (including those by the California Department of Fish and Game, National Marine Fisheries Service, U.S. Bureau of Land Management, U.S. Forest Service, or U.S. Fish and Wildlife Service) or habitat used by the above?		X		
b) Have an indirect or direct adverse effect on any riparian habitat or other sensitive natural community identified in federal, state, local or regional plans, policies, and regulations (including those by the California Department of Fish and Game or U. S. Fish and Wildlife Service)?			X	
c) Have an adverse effect on surface or ocean waters (including those considered by National Marine Fisheries Service as essential fish habitat), or on local aquatic resources, or on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, tidal and freshwater marshes, vernal pools, etc.) either through direct removal, filling, hydrological interruption, pollution (thermal, particulate, or chemical) or other means?		X		
d) Interfere with the movement of any native fish or wildlife species (resident or migratory) or with established native (resident or migratory) wildlife corridors, or limit or impede the use of native wildlife nursery sites?			X	

ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
BIOLOGICAL RESOURCES -- Would the project or related facilities:				
e) Conflict with any local policies or ordinances protecting biological resources, such as 1) a tree preservation policy or ordinance, or 2) a native landscape requirement?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?				X
g) Create an adverse change in commercial or recreational species' distribution or population size, or harvesting opportunities for these species?			X	
h) Facilitate the introduction, population growth, or spread of weedy plant species that are difficult to control (such as those classified by the California Department of Agriculture as List A, List B, or Red Alert species) or other invasive or non-native aquatic or terrestrial wildlife species (such as nest parasites)?				X

A. Sensitive Species

Projects in developed areas typically have less of an impact on sensitive biological resources because of the lack of suitable habitat on site. However, such projects are evaluated for the indirect impacts they could have on any surrounding areas that remain in natural conditions and support biological resources. Staff evaluated several direct impacts associated with the proposed project including:

- permanent loss of upland foraging habitat;
- temporary loss of upland foraging habitat;
- potential bird collisions with the new transmission line or facility stacks; and,
- water quality degradation to Coyote Creek due to stormwater discharge.

Power Plant

LECEF is proposed on a parcel where the City of San Jose requested Calpine to dismantle and remove the abandoned greenhouses and buildings. Calpine c*Power will subsequently use this space for the new simple-cycle plant and switchyard. The

dismantling did not cause significant impacts to state- or federally-listed species. A colony of Yuma myotis bat (state and federal species of concern) was removed from a building on November 7, 2001, prior to demolition (Heady and Frick 2001). This species usually has several alternative roost sites, and no significant impact is expected. The parcel will permanently remove 18 acres of habitat (see **BIOLOGICAL RESOURCES Table 4**) from potential foraging by raptors and small mammals, but this is a less than significant impact for these wide ranging species which have large amounts of undeveloped WPCP bufferlands within 0.25 mile.

BIOLOGICAL RESOURCES Table 4
Habitat Loss (acreage) from Construction of LECEF
(Calpine c*Power 2001a,b,c)

Project Component	Permanent	Temporary
Power plant	18 (8.5[1] +9.5[2])	0
Access road and wastewater return line	5 [3]	5[3]
Stormwater discharge	~~0.005~~[4] 0	0.12 (0.05[4] + 0.07 [3])
Parking and construction laydown area	0	20[1]
Natural gas pipeline	0~~0~~	1.5[1]
Temporary Transmission Line	0	3.3 (3.2[3] + 0.1 [1])
Recycled water line	(same impacts as access road)	2[3]
TOTAL	**23.00~~5~~**	**~~28.62~~31.92**

[1] Agricultural land reverted to disturbed grassland (with ruderal species)
[2] Lite industrial and residential facilities
[3] Agricultural land
[4] ~~Riparian habitat, estimate only~~Upland floodplain, outside of the drip-line of trees

Chemicals used during greenhouse operation included DDT and other pesticides and herbicides which have saturated into the soils (Calpine c*Power 2001a). These chemicals need to be controlled so they remain on-site and are not carried off by wind or rain to off-site locations where sensitive species occur. The contaminated soils are being remediated as a result of the demolition, and LECEF will be placed on uncontaminated soils. No additional conditions of certification are required to protect off-site resources.

LECEF proposes to build a 90-foot combustion exhaust stack. Bird collisions with exhaust stacks and other tall structures can result in significant bird losses when these structures are located in areas where suitable habitat attracts bird populations. Most bird collisions/deaths occur during migration in inclement weather. The site and immediate surrounding areas do not contain attractive habitat (e.g., freshwater marsh or ponds) for low-flying flocking birds on either side which would create a large "cross-over" effect, increasing the chances of collision. Therefore, the proposed 90-foot stack (lighted or unlighted) is unlikely to increase bird collisions or otherwise cause harm to wildlife. The U.S. DataPort buildings are likely to be approximately 45 feet high. This would further discourage low-flying birds from entering the power plant site. Therefore, staff concludes that this potential concern is not applicable to LECEF, and no mitigation is recommended by staff.

Impacts to burrowing owls could occur if construction activities occurred near (within a 250-foot buffer) ~~of~~ active nests or if foraging habitat next to nesting sites is permanently removed. These types of impacts are typically mitigated by avoidance, and if this

cannot be done, then mitigated by acquiring (either by direct purchase or conservation easement) suitable burrowing owl habitat. No sign of burrowing owls has been found during the 2000 and 2001 surveys (H.T. Harvey and Associates 2000, Calpine c*Power 2001a), however the species may move into the area at any time. The site and adjacent properties are consistent with potential nesting and foraging habitat for burrowing owls. Surveys ~~should~~ will be performed to verify the presence or absence of this species prior to site mobilization, and the survey results ~~should~~ will be sent to the CDFG (Biological Resources condition of certification **BIO-11**). The burrowing owls seen during surveys for the U.S. DataPort linears would not be directly impacted by LECEF or its linear facilities. Cumulative losses of this species habitat is discussed in a separate section following Analysis and Impacts.

Linear Facilities

Electrical lines will need to be installed to connect the proposed plant's substation to PG&E's Los Esteros substation. Two lines would be placed underground in PVC conduit encased in concrete duct banks and all construction occurs within the boundaries of the existing power plant complex. Because there is no infrastructure being built outside of the existing lot, and almost no linear facilities will be built above ground, the construction avoids impacts to state- and federally-listed species and no mitigation is necessary. If the applicant ~~is required to~~ installs a temporary distribution line between the site and the lines along Zanker Road, impacts to avian species are expected to be less than significant. The temporary loss of 3.3 acres of agricultural land decreases the amount of foraging land available, but other foraging areas, such as the WPCP bufferlands, could be available for foraging as long as carrying capacity remains available. The east to west transmission line right-of-way (poles and road) is bordered by ~~Highway~~ State Route 237 to the south and the WPCP's bufferlands to the north, and large flocks of low-flying bird flights in between these two features is unlikely. There is an existing distribution to connect Agnew Electric Generating Plant to the Nortec-Trimble Substation circuit. Instead, most species travel north from the WPCP bufferlands to the WPCP treatment ponds or Don Edwards NWR. Thus, installation of additional lines are unlikely to increase bird electrocutions or collisions.

Primary access to LECEF will be from the construction of a 2,700 foot long road within the WPCP buffer lands, west of the site. The construction of the road surface would cause the permanent removal of potential burrowing owl foraging habitat (see **BIOLOGICAL RESOURCES Table 4**) which is discussed under cumulative impacts. The construction of the wastewater line in the shoulder of this road would not cause additional impacts to sensitive species beyond those already identified for the primary access road. Access roads from a second site on Zanker Road and on Alviso-Milpitas Road are also proposed. The access road from Zanker Road is proposed on potential burrowing owl foraging and nesting habitat, and if this species is found prior to site mobilization, construction would result in a significant impact to this species which could be mitigated by Biological Resources condition of certification **BIO-11**. The access road to Alviso-Milpitas Road would have little or no impact. During operation, these roads would receive use only by LECEF's plant employees or PG&E's employees, and no biological impacts are expected.

Construction of the stormwater outfall pipeline would place equipment and personnel within 250 feet of Coyote Creek. Noise and activity associated with construction could disturb avian species and cause them to disperse or avoid the construction area. Construction disturbance during the breeding season of several sensitive birds species (including the loggerhead shrike and white-tailed kite) is considered a potentially significant impact. Disturbance near foraging habitat would be temporary and less than significant as other areas are still available for foraging. Implementation of Biological Resources condition of certification **BIO-7** would adequately protect sensitive avian species, resulting in non-significant impacts. Coyote Creek provides important habitat for numerous aquatic species, including a migration path for the federal threatened steelhead trout (Central California Coast Evolutionary Significant Unit) and the federal candidate Fall-run chinook salmon. Construction activities ~~in or immediately~~ adjacent to Coyote Creek for construction of the permanent concrete outfall (line and above-ground components) could result in ~~some level~~an increase of sediment~~ation~~ in the stream. These impacts would be reduced to the extent possible by following the best management practices described in the **Soil and Water Resources** section of this document and by limiting construction from July to October.

Construction of the gas line ~~is~~will occur along the western edge of the 55-acre parcel. This parcel was developed in a mixture of residential and greenhouse buildings prior to demolition, and no sensitive species or habitat has been identified within the parcel. Agricultural land reverted to disturbed grassland (with ruderal species) is located directly west of the 55-acre parcel, but would only be temporarily disturbed by construction crews and equipment.

The recycled water line would parallel the gas line along the western edge of the 55-acre parcel and then extend west to its connection point with an existing recycled water line buried in the WPCP buffer lands. As noted above, the potential for impacts to sensitive species on the 55-acre parcel is low, but the likelihood increases as the line leaves the site and enters agricultural land reverted to disturbed grassland (with ruderal species). The impacts to burrowing owl foraging and nesting habitat in this area is temporary and can be reduced by implementing avoidance measures if owls are located in future survey efforts (Biologcial Resources condition of certification **BIO-9**).

Worker Parking and Staging Areas

Parking and equipment staging areas required during the site preparation and construction periods would be located on the 55-acre parcel and temporarily disturb 20 acres habitat (see **BIOLOGICAL RESOURCES Table 4**), although exact locations have not been identified. The 55-acre parcel is recently disturbed, and no sensitive species or their habitats were identified on the parcel. The 55-acre site is surrounded with agricultural lands and the noise and lights from construction crews and storage areas are unlikely to cause harm to peripheral biological resources. Disturbance would be temporary in nature, and similar to those from the construction on the power plant site. Mitigation used on the power plant site will be applicable here and will reduce all impacts to less than significant levels.

Indirect Effects

Staff evaluated several indirect impacts associated with the proposed LECEF including:

1. nitrogen deposition;

2. the effluent discharged from the Wastewater Pollution Control Plant; and,

3. noise and light on the sensitive species in adjacent land during operation.

Nitrogen Deposition

The operation of the proposed facility will emit several air pollutants, including nitrogen dioxide and ammonia slip, into the atmosphere. These chemical components often react with the atmosphere to form fertilizing agents (NH_3 and HNO_3). Nitrogen deposition is the amount of nitrogen that converts to particulates and accumulates on soil or other surfaces. The modeling of nitrogen deposition is based on several conservative assumptions regarding chemical conversion rates, weather conditions, and minimum loss of mass. The nitrogen deposition rate considered sufficient to affect ecosystem structure and diversity is 3 to 10 kg/ha/yr depending on vegetation type (Fox et al. 1989). The current best estimate of nitrogen deposition in the vicinity of San Jose is 8.4 kg/ha-yr (Sierra Research 2000).

Modeling of nitrogen deposition from the proposed project estimates that nitrogen deposition would concentrate at the north end of a serpentine range in Santa Clara County (near Silver Creek) and that deposition levels decline in a northwest to southeast direction in relation to distance away from the site and intervening topography. For example, the average nitrogen deposition at USFWS Silver Creek Critical Habitat Unit is modeled to be 0.0283 kg/ha/yr and at the USFWS Kirby Critical Habitat Unit to the southwest, the average deposition is 0.0168 kg/ha/yr (Calpine c*Power 2001d). The serpentine soils in Santa Clara County support many state- and federally- listed species as well as species of concern (see Biological Resources Table 3).

Staff concludes that the project may have minor effects on the soils that support the host plants for these butterflies, but the cause-and-effect to show an indirect impact will occur~~was occurring~~ would be difficult to prove for several reasons:

- The large distance between the source and the area of impact;
- The number of intervening sources of nitrogen in between the source and the area of impact;
- The level of impact when modeled conservatively would be even smaller when typical conditions were assumed; and,
- The trends and changes in ozone pollution continually alter the expected amount of nitrogen deposition.

A final analysis and proposed mitigation of impacts to the bay checkerspot butterfly and Opler's longhorn moth are covered below under the heading Cumulative Impacts.

The plant species identified in *the Recovery Plan for Serpentine Soil Species of the San Francisco Bay Area* are serpentine endemics or near endemics, which are limited to small localized areas where conditions give them an advantage over non-native species. ~~Staff has requested the applicant provide more information on serpentine plant locations.~~ There are several identified occurrences of serpentine plants within the nitrogen deposition plume (Calpine c*Power 2002). The populations of these species are threatened by development pressures in the greater San Jose area, and for some populations, recreational disturbance or cattle grazing. The recovery plan does not identify nitrogen deposition or invasion by non-native grasses (or weeds) as a threat to the Santa Clara County plant populations, but it is a threat to Mt. Diablo State Park's populations of most beautiful jewelflower (USFWS 1998). ~~, but staff has requested the applicant perform this analysis~~ The applicant's nitrogen deposition analysis indicates there is a 0.02 to 0.2% increase above background in the vicinity of these plants. At this time, no indirect impacts have been identified and staff does not recommend any conditions of certification for the benefit of these species directly. ~~Mitigation~~ Protection of land from development as mitigation for cumulative impacts to bay checkerspot butterfly, as proposed under Cumulative Impacts section of this document, may aid these plant species because many are found within the boundaries of the bay chekerspot butterfly's critical habitat units.

Wastewater Pollution Control Plant Effluent

The cooling and process water supply for the project will be recycled water provided by the WPCP and wastewater disposal will be conveyed to the City of San Jose sewer system for treatment at the WPCP. The average and peak influent needs of LECEF are 0.50 million gallons per day (mgd) and 0.82 mgd. LECEF is expected to discharge on average 0.18 mgd and at peak operation 0.30 mgd. The largest component of the industrial waste is the cooling tower blowdown, which is discharged after three cycles of concentration. The effluent discharge from the WPCP goes into Artesian Slough on City of San Jose property. Artesian Slough is hydrologically connected to Coyote Creek, which is part of the Don Edwards ~~Wildlife Refuge~~NWR, and is an area designated to be part of the refuge in the future (Don Arnold, pers. comm. 2001). The 1998 WPCP's National Pollution Discharge Elimination System (NPDES) permit limits the effluent discharge to 120 million gallons per day due to concerns about converting the habitat of two endangered species, the salt marsh harvest mouse and California clapper rail, from salt marsh to brackish or freshwater marsh (Calpine c*Power 2001a). The LECEF discharge, when combined with the current discharge, is not expected to change the current conditions at Don Edwards NWR, or habitat for the two identified species, because the project's discharges do not result in a measurable change in the WPCP's permitted discharge amounts or chemical limits. No mitigation would be required of the applicant.

Noise and Light

Sensitive species such as the burrowing owl and white-tailed kite were identified as using the parcels adjacent to LECEF. Noise and light during the construction of the project can result in disturbance to these species which would result in the loss of use of

the surrounding habitat for several months. Indirect impacts from noise and light from the operation of the power plant will continue if the U.S. DataPort is not built since there would be no intervening buildings to shield these disturbances from neighboring wildlife habitat. In this case, operational impacts from light and noise from LECEF would be adverse, but would not require mitigation. If U.S. DataPort is built to completion, and completely surrounds the site, then no impact from LECEF's light and noise would be apparent. Impacts to biological resources from U.S. DataPort construction are covered under ~~their own~~the U.S. DataPort EIR (City of San Jose 2001).

Critical Habitat and Recovery Plan Goals

As modeled, all of the critical habitat units established for bay checkerspot butterfly would receive nitrogen deposition as result of LECEF operation. The USFWS identified in the serpentine recovery plan (USFWS 1998a), that invasion of native grasslands by non-native species was a major cause of decline of the bay checkerspot butterfly. The LECEF nitrogen emissions (as discussed previously) could increase the ambient nitrogen deposition levels, but would not threaten recovery plan goals directly. Many of the plant species (including Santa Clara Valley Dudleya) were threatened by new development, quarry and landfill expansions, road construction, and off-road vehicles. The growth of San Jose is independent of the availability of power, and much of the growth that threatens plant populations has already been permitted. Therefore, LECEF is not seen as having a direct impact on the recovery plan goals set for listed and sensitive plants.

In the California red-legged frog recovery plan, the USFWS proposed to protect existing core and migration habitat. Although Coyote Creek does not have standing water suitable for breeding, the riparian corridor can assist in dispersal of this species. LECEF will install an outfall in an area of potential red-legged frog dispersal habitat, and this will cause the ~~permanent loss of 0.005 acres of riparian~~temporary loss of 0.05 acres of upland floodplain habitat (see **BIOLOGICAL RESOURCES Table 4**). The construction would not remove any riparian trees or cause disturbance within the dripline of trees. This level of loss is not considered significant because the area is currently low-quality for breeding, and temporary removal ~~does~~ will not preclude dispersal movement. If individuals were present in Coyote Creek, the pre-construction surveys and avoidance measures suggested in Biological Resources condition of certification **BIO-15** should avoid impacts to this species.

B. Riparian and Sensitive Communities

The City of San Jose's *Riparian Corridor Policy Study Guidelines* requires projects adjacent to riparian corridors to be designed to minimize potential noise impacts to wildlife. Guideline 1A requires noises to be oriented toward non-riparian property edges. Guideline 2F requires the operation of mechanical equipment within or adjacent to riparian corridors not to exceed noise levels for open space (as specified in the Noise Element of the City of San Jose's General Plan) [75~~60~~ DNL (Day-Night Sound Level)] or exceed background noise levels. Because this section of Coyote Creek is designated as a Public Park and Open Space, noise levels should not exceed 60 DNL (City of San Jose 2002). Guideline 2F requires the location of noise sources as far as necessary from riparian corridors to preclude exceeding the ambient noise level in the corridors.

Existing dominant noise sources east of the project property line, bordering the Coyote Creek riparian corridor include traffic, rustling trees, and occasional aircraft (Calpine c*Power 2001a, Table 8.5-3). The existing noise level at the project property line riparian corridor is 59 DNL. It is estimated that the plant noise level would be 54 DNL with a cumulative noise level of 60 DNL at the project property line bordering the Coyote Creek riparian corridor (Calpine c*Power 2001a, Table 8.5-12).

High levels of noise can cause hearing loss and other adverse physiological effects to wildlife. Continuous noises that mask the effective communication of meaning sounds (e.g. bird mating songs or warning calls) can interfere with behavioral functions. Both mammals and birds can suffer temporary hearing impairment from 24-hour exposure to noise levels of 80-110 dB (CDT et al. 1995). All vertebrates habituate or adapt behaviorally and physiologically to repeated exposure to noise either through sensitization or avoidance (Bowles 1995). Continuous sound pressure levels at 70 dB are considered a safe limit to wildlife (Bowles 1995). Wildlife use of Coyote Creek is moderate and intermittent noise is currently generated by road traffic on State Route ~~SR~~ 237 and Interstate ~~I~~ 880. While noise levels of 60 DNL will exceed ambient levels by 1 DNL, it will not exceed levels that can result in adverse effects on animal hearing or other physiological functions (80 dB; CDT et al. 1995). Staff concludes that no significant adverse impacts are expected during operation, although construction noise will likely temporarily reduce diurnal wildlife activity (e.g. birds) in the area.

The City of San Jose adopted Ordinance No. 26248 which states illumination in the outdoor areas of new private development must be directed away from riparian areas. The applicant has designed the facility such that all lights would be non-glare to reduce light reaching off-site receptors (Calpine c*Power 2001a), and thus reaching the riparian corridor. There will be no landscape lighting, and ~~S~~staff believes that this design will reduce any adverse impacts to nocturnal wildlife (see Biological Resources c~~C~~ondition of c~~C~~ertification **BIO-17**).

Indirect impacts from noise and light from the operation of the power plant will ~~continue if the U.S. DataPort is not built since there would be~~result because there are no intervening buildings, walls, or landscaping to shield these disturbances from neighboring wildlife habitat. In this case, operational impacts from light and noise from LECEF would be adverse, but would not require mitigation. If U.S. DataPort is built to completion, and completely surrounds the site, then no impact from LECEF would be apparent, and again no mitigation would be required.

For potential indirect impacts due to water quality degradation to the Coyote Creek riparian corridor, please refer to Biological Resources Item C below or the **Soil and Water Resources** section of this document.

C. Surface Waters

Runoff from the project site will be collected and discharged into the Coyote Creek by-pass channel. Stormwater from paved areas has the potential to carry a variety of pollutants including grease, oil, and trace amounts of heavy metals and particulates. Stormwater from landscaped areas can carry pesticides, herbicides, and fertilizers. Although the exact amounts of pollutants carried by stormwater to the by-channel and

eventually to Coyote Creek is unknown, over time, the amount could accumulate. Because of the sensitive resources present, or potentially present in Coyote Creek, pollution is a significant impact. Restrictions on herbicides and pesticides within the Landscaping Plan would reduce this impact to less than significant levels (Biological Resources condition of certification **BIO-17**). While pollution from LECEF in comparison to U.S. DataPort would be dwarfed, the impacts to Coyote Creek are considered probable, and mitigation would be necessary. The impact to resources in Coyote Creek would be minimized to less than significant after implementation of the City of San Jose Grading Ordinance and specific measures proposed by the applicant (SEE **SOIL AND WATER RESOURCES** conditions of certification).

The existing site contained underground storage tanks for diesel fuel and several pesticide mixing/storage areas. Shallow soil samples from around the contaminated areas showed detectable levels of lead, arsenic, and DDT. Soil samples from deeper cores show concentrations do not increase with depth. The soil study concluded that the concentrations detected do not appear to pose a significant threat to human health in a commercial or industrial setting, and the planned remediation after demolition of the greenhouse buildings would remove all remaining contamination. Since the proposed project would result in a site largely capped with buildings and associated concrete pads and parking areas, the risk to the environment would be significantly reduced.

The construction of a stormwater drain to the low-flow channel of Coyote Creek would ~~potentially~~ require the trenching ~~of a pipeline~~ for approximately 100 feet through the berm of the stream channel~~, the removal of a riparian trees (or avoidance of trees),~~ and the construction of a concrete outfall ~~on the bank of Coyote Creek's low-flow (perennial) channel~~on top of an exposed area of existing rip rap. All riparian trees would be avoided, and no disturbance would occur within the dripline of these trees. These actions will require construction equipment and personnel within the 100-year floodplain of the Creek, some bank disturbance, and work ~~in or~~ near perennial waters at the concrete outfall, thus, permits by the CDFG and possibly USACE ~~will~~ could be required to complete this work. ~~Staff has requested the applicant identify if~~No potential wetlands are in the construction area. Designs would also be reviewed by the Santa Clara Valley Water District which maintains the Coyote Creek~~this~~ levee system. Adverse impacts w~~c~~ould occur to the waters ~~and vegetation~~ surrounding Coyote Creek as a result of this work. While erosion- and pollution-control measures would be required as part of the permit process, additional mitigation may be required to protect biological resources (Biological Resources condition of certification **BIO-15**). ~~The applicant has not developed plans for the construction work, and permitting has not begun, thus a final analysis of impacts cannot be completed at this time.~~

The discharge of industrial and sanitary waste from the site, and into the sewer system returns the water to the WPCP (see discussion in Biological Resources Item A). Once combined with the current WPCP's water, impacts to wetlands and riparian habitat from this discharge are not expected because there are no measurable increases in the amount of effluent or its chemical components in the WPCP's discharges to Artesian Slough.

D. Migration Corridors

The nearest wildlife corridor is Coyote Creek which is approximately 1,000 feet away from the eastern edge of the LECEF site. This distance is further than the City of San Jose's minimum setback limit of 100 feet from the edge of the riparian corridor (or top of bank, whichever is greater). Sensitive fish species such as the fall-run chinook salmon and steelhead rainbow trout are likely to occur in Coyote Creek during migration to and from spawning sites upstream. The Coyote Creek riparian corridor also acts as a migration route for neotropical migrant bird species, and provides potential breeding and migration habitat for other sensitive species such as the California red-legged frog. The impacts of construction in this corridor is contained under Biological Resources Item A.

Due to the distance from the project site, LECEF will not directly interfere with the movement of any native fish or wildlife species (resident or migratory) or with established native (resident or migratory) wildlife corridors, or limit or impede the use of native wildlife nursery sites. For potential indirect impacts to biological resources due to water quality degradation of Coyote Creek, please refer to Biological Resources Item B, and the **Soil and Water Resources** section in this document.

E. Ordinance and Native Mature Trees

Any and all trees designated as significant by ordinance, as well as mature but not designated ~~as~~ significant ~~trees~~, provide potential nesting and roosting sites for sensitive species including the white-tailed kite (fully protected) and the loggerhead shrike. The U.S. DataPort (and LECEF) have already removed at least ~~six trees (four red willows on the northern boundary of the LECEF site, one red willow on the southern boundary of the LECEF site, and one plum in the southwest portion of c*Power's 55-acre parcel).~~twenty-four trees from the site, and five remain near the main access road (Nelson 2001). The removal of any and all ordinance and native mature trees will add to the cumulative impacts to these sensitive bird species by reducing potential roosting and nesting habitat. See impacts for foraging loss in Biological Resources Item A.

Although the applicant is not required by the City of San Jose to replace non-riparian, non-significant trees, they will be required to replace the loss of any and all significant trees at a ratio of 4:1 (mitigation:impacts). ~~At this time, the applicant is not sure which trees removed thus far were considered significant, non-significant, immature, or mature. The applicant is currently in the process of revising the aborist's report for review by staff.~~ The City of San Jose will permit and mitigate the removal of trees as part of the Planned Development Permit. Staff has mitigated the potential impacts ~~of~~ to all remaining ordinance and native mature tree loss by requiring replacement (Biological Resources conditions of certification **BIO-12** and **BIO-13**). The number of trees to be replaced will be set forth in the Native Mature Tree Replacement Plan and incorporated into the Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP).

F. Adopted HCPs~~: No Impact~~

The two approved HCPs in the San Jose area are operated by a private developer and the other by PG&E. These HCPs established preserves within serpentine habitat of Santa Clara County. Because the HCP's are ensuring the recovery of the bay checkerspot butterfly by mitigating their own impacts, but are not regional in nature, the

development of LECEF does not conflict with the provisions of these plans. There is current funding for a regional plan, but none has been approved by USFWS, and no further analysis is provided in this document.

G. Commercial And Recreational Species

There are no significant biological resources of commercial or recreational value on the LECEF project site. Species along the Coyote Creek riparian corridor are of recreational value to the occasional observer. Several trails exist, or are planned near the proposed LECEF site. These trails are acknowledged in the Alviso Master Plan, the San Jose 2020 General Plan, and the County of Santa Clara's Trails Master Plan. In most cases, these trails are intended to be used by both pedestrians and bicyclists, but will also likely increase the use of the creek by recreational fishermen. To the north, bordering the WPCP sludge drying ponds and buffer lands, there is the San Francisco Bay Trail. To the east, the Coyote Creek/Llagas Creek Trail is planned along the west side of Coyote Creek and one is planned along the east side of Coyote Creek. There is also a trail on the south side of the property, just north of State Route ~~HWY~~ 237. Construction in the area of the trails during installation of the stormwater outfall pipe could temporarily disturb species that are of recreational value to trail users.

Impacts to recreational fish species have the potential to occur due to increased erosion and sedimentation from construction activities. For more information about potential indirect impacts due to water quality degradation to biological resources to the Coyote Creek riparian corridor, please refer to Biological Resources Items A and C. General erosion and sediment issues have been covered by **Soil and Water Resources** in this document.

H) Weeds

There will be a temporary disturbance of approximately 20 acres of disturbed grassland (with ruderal species) for the parking and laydown area **(see BIOLOGICAL RESOURCES Table 4)**. The applicant states that it will be revegetated with like species after construction (Calpine c*Power 2001a). Prior to the use of this area, topsoil will be salvaged from the site and stockpiled at one end of the site. After construction, the laydown area will be stripped of any armoring material, the surface scarified, and top soil restored. The applicant anticipates that the 20 acres will be revegetated with barley seed during the winter following construction. It is expected that the barley will provide a temporary cover crop to hold soil and allow seeds in the native topsoil to sprout and restore a cover similar to that which existed prior to construction. The length of time between disturbance and restoration could vary with construction schedules and take up to two years for full restoration (Calpine c*Power 2001c). Prior to full restoration of like species, invasive, non-native plants could dominate the 20-acre laydown and parking site, potentially resulting in an overall slight increase in invasive, non-native species. This is not expected to result in a significant impact because there already is a high percent of ruderal species that exist within these 20 acres and surrounding areas.

By following the Biological Resources Condition of Certification **BIO-17**, the introduction and spread of weedy plant species (such as those classified by the California Department of Agriculture as List A, List B, or Red Alert species) will ~~most~~ likely be

avoided. Potential indirect impacts to sensitive species associated with the spread of non-native grasses is discussed in Biological Resources Item A.

CUMULATIVE IMPACTS

Cumulative impacts are those that result from the incremental impacts of an action added to other past, present, and reasonably foreseeable future actions, regardless of who is responsible for such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

If the PG&E Los Esteros substation, as part of the Northeast San Jose expansion, or U.S. DataPort are constructed at the same time as LECEF, dust and noise from heavy equipment could have a combined impact on nearby biological resources larger than if they were built at separate times. Although difficult to quantify for individual species, the general trend is for species to leave an area once a threat (perceived or actual) reaches a threshold. Individuals of each species also have their own threshold levels for human disturbance which cannot be predicted. Because both projects are taking place on disturbed land as a result of the demolition, the actual disturbance is to those species living or using the surrounding areas. The projects are directly adjacent to or on agricultural lands, WPCP buffer lands, and Coyote Creek, all of which provide foraging and nesting habitat for sensitive species. The combined impact of constructing one or both of these projects at the same time as LECEF would be significant. Measures to prevent impacts have been suggested in the environmental documents for both of these projects, and LECEF should follow these as well as Biological Resources condition of certification **BIO-15** to ensure impacts are mitigated to less than significant levels.

It is reasonably foreseeable that as a result of this project, additional infrastructure will be added to the site to convert the combustion generators' exhaust into energy through a heat recovery steam generator. The infrastructure, by design, is directly connected to existing facilities, and thus only impacts the areas disturbed during construction of the simple cycle plant. The disturbance during construction of a combined cycle would be restricted to the site or the previous worker staging and parking areas. All linears would already be in place, and no further work is foreseeable. Because impacts to the entire 15-acre site and 20-acre laydown area were assumed for construction of the simple-cycle plant, no future incremental (cumulative) habitat losses are expected as a result of LECEF. Like the LECEF simple-cycle plant, the disturbance to surrounding biological resources would be likely during construction from lights and noise, but would be temporary and less than significant, and would not take place at the same time as the simple-cycle construction. Operational impacts of a combined cycle plant would be evaluated separately for their potential impacts to off-site biological resources, but because the simple cycle is decommissioned as a result of a combined cycle plant, no significant cumulative impacts would result from operation.

Construction of LECEF will result in an impact to burrowing owls for its permanent removal of 13.5 acres (8.5 + 5 acres) of potential foraging and nesting habitat (see **BIOLOGICAL RESOURCES Table 4**). The continued loss of such foraging habitat is a significant cumulative impact that jeopardizes the continued existence of burrowing owls in the Santa Clara Valley. For the 110 acres of habitat disturbance from U.S. DataPort

(60 acres of the 174-acre site were considered as developed), the analysis calculated 55 acres of foraging habitat was necessary to reduce cumulative impacts to less than significant levels (City of San Jose 2001). However, the City of San Jose adopted the EIR without mitigating for the cumulative loss of burrowing owl foraging habitat, and it remains a significant and unmitigated impact if U.S. DataPort is built (City of San Jose 2001). LECEF power plant site, but not the linears, were part of the 60 acres removed from the City of San Jose habitat loss calculation. Staff estimates that part of the power plant site (8.5 out of 18 acres) and all linears are potential habitat for burrowing owls. To avoid a significant and unavoidable impact as a result of LECEF, staff recommends 6.75 acres of land be preserved on the 55-acre parcel or on the Cilker property (U.S. DataPort property) as part of Biological Resources condition of certification **BIO-11**. If land cannot be secured on site or adjacent parcels, or in Santa Clara County, then staff would require up to 20.25 acres be purchased (Biological Resources condition of certification **BIO-11**).

As noted in the U.S. DataPort EIR (City of San Jose 2001), replacement habitat for nesting and foraging burrowing owls is not available in northern Santa Clara County except on city-owned lands, and the City does not permit its lands for mitigation of privately-operated projects (City of San Jose 2001). In response to the Draft EIR, CDFG requested the City require U.S. DataPort to acquire burrowing owl habitat outside of northern Santa Clara County, but this was not adopted. There is no conclusive evidence that mitigating habitat losses outside of the county would benefit the species inside of Santa Clara County. If burrowing owls are found on or near the site and on-site mitigation cannot be obtained, staff cannot suggest a mitigation that will fully reduce this significant cumulative impact to Santa Clara County's burrowing owls to less than significant levels; although acquiring off-site habitat would reduce impacts to this species on a state-wide basis to less than significant levels (Biological Resources condition of certification **BIO-11**).

The location of other power plants under development or with applications near completion in the vicinity of the proposed project include MEC, Gilroy, and Spartan. The approved MEC will be using recycled water from San Jose, but withdrawal from this source does not directly impact plant or wildlife habitat. The other two proposed projects (Gilroy and Spartan) do not use the same water supply or discharge facility and~~,~~ are geographically isolated from the proposed plant, but do contribute air pollutants to the same air basin. In reviewing the projects above, staff would not expect any overlapping, or additive, impacts from water pollution, traffic, noise, or lighting, but did review the potential for cumulative air quality impacts.

NITROGEN DEPOSITION

The emissions from the proposed project could result in nitrogen deposition on serpentine soils in Santa Clara County above the ambient conditions. In a recent siting case [Metcalf Energy Center (MEC)], extensive air modeling was done to precisely identify the location and amount of nitrogen deposition resulting from that energy facility. In addition, a cumulative air impact analysis was done on two proposed projects, Coyote Valley Urban Reserve and Coyote Valley Research Park. Both of the proposed projects would require vehicle trips along Highway 101 between Metcalf Canyon and South Coyote. The end result of the modeling concluded MEC could deposit 0.28

kg/ha-yr on Coyote Ridge above ambient conditions and the vehicles on Highway 101 were unlikely to result in deposition. The impact levels of LECEF are compared with the previous modeling results for MEC and Highway 101 Vehicles **in Biological Resources Table 5**.

The same model and model assumptions were used in LECEF as in the MEC siting case, but additional polygons were added for the LECEF analysis as a result of the USFWS establishing critical habitat for the bay checkerspot butterfly in April 2001 (USFWS 2000v). Thus, instead of the approximately 4,000 acres of butterfly habitat used in MEC, the modeling for LECEF assumed approximately 22,000 acres of butterfly habitat. Where possible, developed lands were removed from the 22,000 acres designated in Santa Clara County. The USFWS notes that only currently undeveloped areas supporting the primary constituent elements of bay checkerspot butterfly habitat would be subject to regulatory oversight by the USFWS (USFWS 2001c). Unoccupied areas were included when they were deemed by USFWS to be essential to the conservation of the subspecies (USFWS 2001c). In LECEF there is no physical proximity of serpentine soil areas (the distance between the facility and the nearest USFWS Critical Habitat Unit is six miles) and there are a number of other point sources of nitrogen occurring in the intervening air basin. However, LECEF is similar to MEC in that it has relatively low elevation and absence of intervening land masses. The end result of the modeling concluded that LECEF could result in some level of nitrogen deposition on serpentine soils above ambient conditions, but the level is ~~far~~ less than that modeled for MEC (see **BIOLOGICAL RESOURCES Table 5**).

BIOLOGICAL RESOURCES Table 5
Comparison of Nitrogen Emissions between LECEF, Metcalf Energy Center, and Highway 101 Vehicles (Calpine c*Power 2001a,c)

Parameters	LECEF	Metcalf Energy Center[1]	Highway 101 Vehicles[1, 2]
Maximum Daily Emissions (lb/day)	820.8 (four combustion gas turbines)	1,362.6 (two combustion gas turbines with duct burners)	706.5
Annual Emissions (tons per year)	74.9 (for four turbines) to 79.6 (for facility)	185.0	117.2
Maximum Annual Emissions from Emergency Generator (tons per year)	0.0918 (natural gas~~diesel~~, 1~~2~~00 hours of operation per year)	0.2 (natural gas fired)	Not Applicable
Maximum Annual Emissions from Fire Pump (tons per year)	0.37 (diesel, 100 hours of operation per year)	0.4 (diesel)	Not Applicable
Maximum Modeled Nitrogen Deposition at Coyote Ridge/Kirby Critical Habitat Unit (kg/ha-yr)	0.0392	0.28	Deposition expected to remain on valley floor

[1] Data from MEC's Informal Data Requests and Responses (99-AFC-3), dated April 28, 2000 and the Section 8.1 of the Metcalf Energy Center's AFC

[2] For highway travel along Highway 101 between Metcalf Canyon and South Coyote (approximately 5 km, directly adjacent to Coyote Ridge) resulting from vehicles to Coyote Valley Urban Reserve and Coyote Valley Research Park (future projects), southeast of MEC

Recent work on bay checkerspot found air pollution on Coyote Ridge (which includes the Silver Creek and Kirby Critical Habitat Units) is already likely to be at levels adversely affecting serpentine plant communities, with negative effects on the bay checkerspot butterfly (Weiss 1999). Opler's longhorn moth is even more host specific, and would be harmed by the loss of its host plant. The USFWS is having ongoing consultation with the U.S. Army Corps of Engineers (USACE), Federal Highway Administration, City of San Jose, and Santa Clara County to address the risk posed by nitrogen deposition. To improve conditions for the butterfly, most federal (Section 7) and Habitat Conservation Plan (Section 10) consultations result in the applicant purchasing areas to be managed as preserves (USFWS 1998). Well-managed, moderate grazing must be maintained at the preserve sites that are expected to support the butterfly (Weiss 1999). In Santa Clara County, no impact to serpentine plants from nitrogen deposition has been identified (USFWS 1998), but because of their overlap with the bay checkerspot butterfly, preservation of its land could benefit these plant species.

The potential impacts from the nitrogen deposition could be reduced if the proposed project could reduce overall nitrogen in the vicinity of serpentine habitat. Offsets in the form of Emission Reduction Credits (ERCs), are required for NO_x at a ratio of 1.15:1 in order to assure that LECEF would not interfere with the Bay Area Air Quality Management District's (BAAQMD's) future "attainment" of the standards for ozone. The

applicant has presented two proposals to reduce nitrogen emissions (McBride 2001), and the **AIR QUALITY** section of this document should be consulted for further information. In the first proposal, the existing turbine at Calpine Giloy Cogeneration Plant (Gilroy, California) could be retrofitted to reduce nitrogen emissions from that plant. As a result of this retrofit, the applicant will have offset 88 tons per year pending the BAAQMD's approval of the credits. As a second choice, the applicant could purchase ERCs from several certificates available in the basin (150+ credits are identified). Depending on the proximity of the ERCs to San Jose, there could be no net change in the ambient nitrogen levels at the serpentine soil areas as a result of LECEF.

The effects of this deposition, when combined with the ambient conditions and with an additional three power facilities, could cause significant harm to several state- and federally-listed species unless deliberate management actions are taken. Because of the concern for these species, and an identified need to improve conditions for these species, the applicant should purchase and manage lands for the benefit of the state- and federally-listed species (Biological Resources condition of certification **BIO-16**). Impacts to these species would be less than significant after mitigation.

MITIGATION

APPLICANT PROPOSED MITIGATION

Project Construction

The following measures will be implemented in all LECEF project construction areas:

- Provide worker environmental awareness training for all construction personnel ~~-~~that identifies the sensitive biological resources and measures required minimizing project impacts during construction and operation.
- Avoid sensitive habitat and species during construction by developing construction exclusion zones and silt fencing within 500 feet of sensitive areas.
- Pesticides or herbicides will not be used in project areas.

Prepare construction and compliance reports that analyzes the effectiveness of the mitigation measures (See Appendix 8.2C [of the AFC] for a draft of the ~~b~~Biological ~~m~~Monitoring and ~~m~~Mitigation ~~i~~Implementation ~~p~~Plan).

Special Biological Resources

Specific mitigation/protective measures were developed to minimize project impacts for the sensitive habitats of the Coyote Creek riparian corridor, and for the loss of significant/heritage trees in Santa Clara County and San Jose. The following paragraphs describe additional mitigation/protective measures that will be implemented for these sensitive areas.

Coyote Creek Riparian Corridor

The following protective measures are proposed to avoid impacts to the potential habitats of biological resources in the Coyote Creek corridor.

- Avoid Coyote Creek habitats.
- Implement erosion control in the temporary impact areas, especially near wetlands and waterways.
- Revegetate temporary disturbance areas with like species (i.e. grassland species in grassland areas).

Significant Trees

The following mitigation measures would reduce impacts to significant trees to less than significant.

- Minimize the number of significant trees removed from the LECEF project site for construction and operation activities.
- Construction vehicles, equipment, and materials will be restricted from the drip line of the remaining trees.
- Provide replacement trees at a ratio of at least 4:1 (replace three trees for every tree removed) with tree species as agreed upon with City of San Jose.
- Plant replacement trees as close to the original location as possible
- Design proposed linear facilities to avoid drip lines and removal of significant and heritage trees.
- Have the mitigation and monitoring plan reviewed and authorized by the San Jose City arborist before construction activities begin.

Revegetation

Prior to use of the 20-acre laydown area, topsoil would be salvaged from the site and stockpiled at one end of the site. After construction, the laydown area would be stripped of any armoring material, the surface scarified, and topsoil restored. It is anticipated that the 20 acres would be revegetated with barley seed during the winter following construction. The barley would provide a temporary cover crop to hold soil and allow seeds in the native topsoil to sprout and restore a cover similar to that which existed prior to construction. The length of time between disturbance and restoration could vary with construction schedules, but in no case would be greater than two years between construction and restoration. Because grasslands can grow in one wet season, functional revegetation will occur rapidly once use of the construction laydown area is complete.

Purchase of Habitat Compensation for Serpentine Endemics

Although the applicant believes that the nitrogen deposition impacts from LECEF are immeasurable and insignificant, they are committed to participate in reducing cumulative effects that result from the addition of nitrogen emissions to the air basin (Calpine c*Power 2001d). The applicant will place 19 acres of suitable serpentine

habitat from Kirby Canyon in a conservation easement to be maintained in perpetuity for the protection of bay checkerspot butterfly and other serpentine species. Based on output from the Center for Natural Lands Management Property Analysis Record (PAR), the applicant will provide an endowment sufficient to pay for the management of the easement area in perpetuity. The applicant will authorize a third party to implement an adaptive management strategy to promote habitat for bay checkerspot butterfly and other serpentine species. The grazing prescription proposed is one cow per 10 acres and the applicant will create a contingency plan for fencing if other landowner's livestock affects this prescription. As part of the applicant's habitat management efforts for MEC, nitrogen deposition monitoring stations within serpentine habitats of Coyote Ridge will be installed to collect information about actual levels of deposition. This data will be used as part of the adaptive management of LECEF's preservation lands.

STAFF PROPOSED MITIGATION

Replacement of Ordinance and Native Mature Trees

Staff's objectives for an Oordinance and Nnative Mmature Ttree Rreplacement Pplan include the following:

- A qualified arborist or biologist should identify appropriate location(s) for mitigation on-site.
- The replacement tree(s) should be installed in an environment suitable for their establishment and growth.
- Replacement tree(s) should be propagated from specimens within the Coyote Creek watershed.
- Ordinance Tree(s) should be replaced at a 4:1 (mitigation:impacts) ratio with 24-inch box specimens.
- Native mature tree(s) should be replaced at a 1:1 (mitigation:impacts) ratio with a one-gallon or larger specimen.
- All planting should be done from November to January.
- Replacement tree(s) should be irrigated and maintained for a period of not less than three years.

In addition, staff recommended the replacement tree(s) be the same native species as those removed. Also, the replanting location(s) should avoid any distribution line right-of-ways in which the mature tree might come into contact with live wires (in order to prevent potential electrocution of roosting birds). The replanting location(s) should also avoid the loudest areas and those areas that are immediately down wind of the cooling tower drift. In addition, staff concurs with the CDFG (CDFG 2001, pers. comm.) that all replacement trees should be monitored for a minimum of 5 years. Staff has included a condition of certification to monitor replacement trees as part of the Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP) (Biological Resources condition of certification **BIO-12**).

Landscaping Objectives

Staff's objectives for a landscaping plan include~~d~~ the following:

~~- Remove invasive, non-native plants (e.g., yellow star thistle) from LECEF whenever possible to avoid the spread of weeds to the riparian corridor buffer zone.~~

~~- Select a drought tolerant mix of native species. Trees may include coast live oak, blue elderberry, red willow, and box elder or others, as found in the San Jose Riparian Corridor Policy.~~

- direct landscaping lights away from the riparian area;
- limit the amounts of biocides used on the project site;
- remove invasive, non-native plants (e.g., yellow star thistle) whenever possible to avoid the spread of weeds to the riparian corridor buffer zone. Employ the most effective aspects of the following control methods: 1) manual removal and, 2) mechanical control through soil disturbance. If the previous two methods are unsuccessful in controlling the problem, the following method could be used: 3) herbicides with low environmental persistence, applied from ground-based equipment. These products should only be used within the parameters presented on the label;
- aviod plant species that are not already found within the Coyote Creek watershed to avoid potentially new hybrids from cross-pollination;
- select a drought-tolerant mix of native species for ground cover;
- select a drought-tolerant mix of native tree species to the extent possible, particularly along the eastern edges of the landscaped areas (facing Coyote Creek);
- avoid long-term irrigation and limit short-term irrigation;
- avoid landscaping species/design(s) which would require initial and/or future maintenance equipment that contribute to noise and/or air pollution; and
- avoid the use of non-native ground cover (e.g., bark, rocks, soils).

Purchase of Habitat Compensation for Burrowing Owls

When the proposed LECEF project is combined with other development in northern Santa Clara County there is a significant cumulative loss of foraging habitat for burrowing owls. In addition, if nesting burrowing owls are found on the site or along ancillary linears during pre-construction surveys, and their nests cannot be avoided, then there is a significant direct impact to this species. To mitigate this impact, staff recommends habitat compensation be purchased and preserved following the protocol shown below in **BIOLOGICAL RESOURCES Table 6**.

Off-site habitat mitigation would be less effective than on-site habitat mitigation. If lands must be acquired off-site, mitigation ratios should follow the guidelines from the California Burrowing Owl Consortium (1993). For example, if the habitat purchased is off-site, contiguous to occupied habitat but not itself occupied, then the replacement ratio should be increased by 1.5 times (e.g., 6.5 would become 9.75). If habitat

purchased is off-site, isolated from other populations, and suitable but currently unoccupied habitat, then replacement ratio should be increased by three times (e.g., 6.5 would become 19.5).

BIOLOGICAL RESOURCES Table 6
Burrowing Owl Habitat Compensation (Mitigation:Impact)

	Nesting Habitat that is Occupied	Foraging Habitat next to Nesting Habitat that is Occupied
In Northern Santa Clara County	6.5:1	0.5:1
In Contiguous County or Southern Santa Clara County	9.75:1	0.75:1
All other counties	19.5:1	1.5:1

Purchase of Habitat Compensation for Serpentine Endemics

When the project is combined with other facilities in the Santa Clara Valley, the cumulative impact to serpentine endemic species is significant. Staff proposes habitat compensation lands be acquired, either by purchase or by easement, to offset impacts. Staff proposes to follow the MEC model for calculation of impacts. For example, average deposition of 0.0138 kg-ha/yr on Communications Hills Critical Habitat Unit represents 0.16 percent of the ambient levels (8.4 kg-ha/yr) (Calpine c*Power 2001e). Multiplying 0.16 percent by the 442 acres of the Unit yields 0.71 acres. Calculation for all of the remaining USFWS Critical Habitat Units should result in between 40 and 45 acres of habitat impacted (Calpine c*Power 2001e) without taking into account the habitat quality of the Units. As recognized in the MEC proceedings, and in the designation of Critical Habitat, some of the Units are in degraded condition and/or currently unoccupied by bay checkerspot butterfly (USFWS 2001c). However, the Critical Habitat Units have the physical and biological features that are essential to the conservation of the bay checkerspot butterfly and therefore even unoccupied Units were included when they were essential to the conservation of the butterfly (USFWS 2001c, page 21462). Staff will be requesting the applicant mitigate LECEF's impact with the purchase of lands within occupied Unit(s) in Biological Resources condition of certification **BIO-16** to offset the cumulative loss of habitat for the serpentine endemic species.

COMPLIANCE WITH LORS

The federal Endangered Species Act, as amended (Act), and the Fish and Wildlife Coordination Act, requires federal agencies to consult with the USFWS and the agency exercising administration over wildlife resources of the particular state wherein the proposed project is to be constructed or action taken (e.g., CDFG). The simple-cycle power plant does not require any federal permitting, and therefore coordination is left to the state administrating agency and the project applicant. If either of these two parties wanted coverage for actions which result in the incidental take of federally-listed species, then a Section 10 consultation would need to be initiated and formalized by a

Habitat Conservation Plan. The Act does not require applicants who do not anticipate incidental take to apply for permit protection, however if take were to occur without a permit, then penalties could be issued by the USFWS. Based on the nitrogen deposition modeling data from the November 2, 2001 Data Response (Calpine c*Power 2001c), the USFWS wrote the Energy Commission recommending consultation by the applicant or USEPA be pursued (USFWS 2001d). ~~.~~ However, their conclusion was made prior to the completion of this Staff Assessment and the recommended Conditions of Certification. The applicant is not pursuing consultation and the USEPA is not considered an active federal agency in this project. The USFWS could file an action under the Act against the applicant alleging "take" any time during project operation. The USFWS would need to argue that nitrogen deposition is causing a habitat modification or degradation which has killed or injured the bay checkerspot butterfly. In light of the small amount of nitrogen deposition, lack of a clear cause-and-effect, and the applicant's use of Best Available Control Technology (BACT) and purchase of ERC's under the BAAQMD's air quality regulations, this would be difficult to prove, but nonetheless could delay or stop operation until resolved.

The applicant may require City permits for the ~~future~~ removal of any and all remaining ordinance-sized trees (see Biological Resources LORS). The removal of trees during demolition (October through December 2001) will be permitted and mitigated under the City of San Jose Planned Development Permit. The ~~is~~ tree-removal permit is addressed in the Biological Resources conditions of certification **BIO-12** and will be obtained at least ninety (90) days prior to ~~the start of construction activities for LECEF~~the removal of any remaining trees. ~~Several trees on the LECEF site that were initially considered ordinance-sized were removed as part of the U.S. DataPort site preparation. At this time, the applicant is not sure which trees removed thus far were actually ordinance trees. The applicant is currently in the process of revising the aborist's report for review by staff.~~ Staff concurs with the City of San Jose that all ordinance-sized trees be replaced at a ratio of 4:1 (mitigation:impacts) and has proposed mitigation to offset impacts to nesting birds from the loss of remaining mature trees (Biological Resources condition of certification **BIO-12**). The procedures to replace trees will be part of a Native Mature Tree Replacment Plan (**BIO-13**).

The City of San Jose has several policies that address development requirements in riparian areas (see Biological Resources LORS and **Land Use**). Retaining ambient noise levels and lighting in riparian policies are not strictly adhered to by the LECEF design (see the **PROJECT DESCRIPTION** section in this document). The City of San Jose also has a setback policy which prohibits construction within 100 feet from a riparian corridor~~. The applicant must comply with this policy and submit any future plans for any potential riparian corridor construction to staff for review.~~ This setback policy allows exceptions for utility installations which involve no significant disturbance and generate only incidental human activity. The construction of LECEF's outfall structure in the riparian corridor would meet the exception criteria. The City of San Jose does not see the installation of a storm drain as a violation of the riparian setback policy (Crabtree, personal communication 2002).

Construction on the interior side of the levee ~~will~~ could require a Streambed Alteration Agreement by the CDFG if the CDFG review of the application materials determines the project may substantially adversely affect existing fish or wildlife resources (Fish and

Game Code §1601(a)). , and possibly a Ppermits by from the USACE and Regional Water Quality Control Board would be required if the applicant cannot keep all project components outside of the ordinary high-water-mark (see **SOIL AND WATER RESOURCES** section). As currently designed, the USACE and Regional Water Quality Control Board permits would not be needed. The CDFG permit is typically delayed until the adoption of the California Environmental Quality Act (CEQA) document by the lead agency, which in this case would be the Energy Commission's final decision on this proceeding. The applicant would not be allowed to begin construction without obtaining this permit, or showing evidence that no permit was required. The applicant plans to turn in their CDFG Streambed Alteration Agreement application in February 2002.

FACILITY CLOSURE

The region surrounding the proposed project, upon completion of the U.S. DataPort complex, would be industrial in character, and is expected to remain so for years to come. The closure of the power plant and ancillary features (either temporary or permanent) would not have an impact to biological resources, and no measures are necessary unless U.S. DataPort (or similar facility) construction has not started at the time of closure.

Sometime in the future, LECEF will experience either a planned closure, or be unexpectedly (either temporarily or permanently) closed. When facility closure occurs, it must be done in such a way as to protect the environment and public health and safety. To address facility closure, an “on-site contingency plan” will be developed by the project owner, and approved by the Energy Commission Compliance Project Manager (CPM). Facility Closure mitigation measures will also be included in the BRMIMP prepared by the applicant.

PLANNED OR UNEXPECTED PERMANENT FACILITY CLOSURE

The planned permanent or unexpected permanent closure plan is addressed in Biological Resources condition of certification **BIO-8**.

UNEXPECTED TEMPORARY CLOSURE

Staff does not have any biological resource facility closure recommendations in the event of an unexpected temporary closure of LECEF. However, in the event that the Energy Commission CPM decides that the facility is permanently closed, the facility closure measures provided in the on-site contingency plan and the BRMIMP would need to be implemented.

RESPONSES TO PUBLIC AND AGENCY COMMENTS

CDFG has only given verbal comments on the AFC.

The public has not submitted comments related to biological resources on this project to staff.

U.S. FISH AND WILDLIFE SERVICE

USFWS questions and comments were shared with Energy Commission biological resource staff and applicant at a meeting on September 7, 2001 and in a letter dated November 30, 2001. Questions were specific to the Endangered Species Act of 1973 as amended (Act) regarding impacts from potential nitrogen deposition to serpentine habitat. Serpentine soils support the federally threatened bay checkerspot butterfly, and federally endangered Santa Clara Valley dudleya, Metcalf Canyon jewelflower, Coyote ceanothus, and Tiburon paintbrush.

USFWS 1: The USFWS' position is that "[w]hile the contribution of nitrogen from LECEF Phase I alone is relatively low, any incremental increase in nitrogen deposition to an already stressed ecosystem would affect the habitat further."

Response: The position of the USFWS has been noted in this document.

USFWS 2: The USFWS' position is that indirect "take" is likely to occur in the form of harm from habitat degradation. To be exempt from the Act, the USFWS requires consultation through Section 7 of the Act or a Habitat Conservation Plan per Section 10 of the Act.

Response: The decision of whether a project causes "take" is strictly between project proponents, federal agencies, and the USFWS; the Energy Commission can not make this determination. The applicant is not pursuing consultation and the presence of a federal permitting authority has not been confirmed.

USFWS 3: The USFWS cannot approve projects that do not have coverage for incidental "take" of listed species. The USFWS will only review the applicant's proposal to mitigate "take" with habitat and air pollution credits (i.e., emission reduction credits or ERCs) purchases under a consultation. USFWS further believes that "a temporary net increase of ambient air pollution will still result from this project."

Response: Staff agrees with the USFWS that there is a potential net increase in nitrogen deposition in conjunction with other existing sources. Staff has requested habitat and air pollution credits (i.e. ERCs) purchases as mitigation to compensate for that significant cumulative impact. The applicant decision to consult for coverage under the Act is voluntary and the presence of a federal permitting authority has not been confirmed.

USFWS 4: The USFWS' understanding is that the Environmental Protection Agency (EPA) would consult on the effects to listed species during (an anticipated but yet-to-be proposed) Phase II of the LECEF project; a conversion to a combined cycle power plant. The USFWS states that consultation at this phase "…has the effect of foreclosing the formulation or implementation of reasonable and prudent alternatives which would avoid violation of Section 7(a)(2) of the Act." As a result, USFWS suggests that the Energy

Commission require the applicant to obtain permits from the Bay Area Air Quality Management District (BAAQMD) for both phases of the project so that "EPA can consult with the [USFWS] on the entire project". The USFWS further states their understanding that the "…BAAQMD will issue air quality credits that will mitigate the impacts to air quality. If a permit cannot be issued, [the USFWS] request[s] that Calpine be required to have EPA consult on the issuance of air quality credits for this project."

Response: The applicant has not given the Energy Commission information on the combined cycle power plant project, and the project being permitted has no EPA involvement. If a federal agency consults on a future project related to this same applicant, the development of alternatives based on types of technology or time of operation is possible. The issuance of air pollution credits (i.e., ERCs) for the simple-cycle plant does not require approval by the EPA since only the BAAQMD has this authority (see Air Resources section of this document). The Energy Commission cannot require an applicant to take actions on a power plant project that is not under our review. Thus, staff has not required the applicant to obtain a permit for "take" on the future combined cycle power plant as requested.

USFWS 5: The USFWS requests that a revised data response should be submitted which "…list[s] all critical habitat units on Coyote Ridge, as well as any other units which will be affected by the LECEF, and all population sites of Santa Clara County's listed serpentine plants which may be affected by this project."

Response: The applicant submitted a table showing all Critical Habitat Units in their December 11, 2001 Data Response (Calpine c*Power 2001e). This information was forwarded to the USFWS. Information on Santa Clara County's listed serpentine plants was received on January 11, 2002 (Calpine c*Power 2002) and is incorporated into this document.~~is requested in the Conclusions and Recommendations section.~~

CITY OF SAN JOSE

The City of San Jose (City) provided clarifications, comments, and questions regarding several areas of the LECEF project based upon the AFC, and referenced to the Final Environmental Impact Report for the U.S. DataPort project (FEIR). The letter to staff was dated November 2, 2001, and covered many areas of the project. In addition to the written letter, City staff attended the Informational Hearing, and the Data Request and Issues Workshop held November 5 and 6, 2001, and the Staff Assessment Workshop on January 14, 2002. The City input is enumerated by referenced section.

Biotics

(BIO) City 6: The City would like the AFC to include an expanded discussion (within the environmental setting section) of the ruderal and agricultural habitat as it provides foraging and nesting habitat for the burrowing owl.

Response: Staff cannot comment on the AFC on behalf of the applicant.

(BIO) City 7: The staff assessment should include the information that the Northern Harrier, a Special Status species, nests and forages in the vicinity.

Response: Staff discussed this information in Biological Resources Table 1 and in the Local Setting of this document.

(BIO) City 8: The staff assessment should include a discussion regarding the possible "take" of burrowing owl and northern harrier and, reductions in habitat. The discussion should include a discussion of possible impacts from LECEF and mitigation where appropriate.

Response: Staff discussed these species in Item A of the Analysis and Impacts section and Cumulative Impacts section. Mitigation is proposed in the Mitigation section of this document and in the Proposed Biological Resources Condition of Certification BIO-11.

(BIO) City 9: A further analysis, including specific alignment routes and proposed grading plans, regarding any new trenching to support stormwater runoff improvements and possible biotic impacts (AFC page 8.2-13) is needed in the AFC.

Response: In response to staff's October 10 and 12, 2001 Data Requests, additional information on a permanent outfall design was provided (Data Response #17). A grading plan has been submitted in response to Data Request #96.

(BIO) City 10: Further documentation is needed in the AFC to demonstrate the conclusions regarding the amount of nitrogen deposition on Coyote Ridge (AFC page 8.2-13).

Response: In response to staff's October 10 and 12, 2001 Data Requests #147 to 154, additional information on nitrogen deposition has been provided. This information is found under Item A of the Analysis and Impacts section and Cumulative Impacts section of this document.

(BIO) City 11: The City wants text in the AFC to discuss the avoidance of the City's 100 foot Riparian Setback area as defined in the City's Riparian Corridor Policy.

Response: Staff cannot comment on the AFC on behalf of the applicant.

(BIO) City 12: "Any ordinance-sized trees removed by the project, as defined by the City of San Jose Ordinance, shall require replacement with 24 [inch] box specimens at a 4:1 ratio." Reference to AFC page 8.2-17 is made.

Response: Staff informed the applicant during the Data Request Workshop (November 6, 2001) that the City requires ordinance-sized trees be replaced at a 4:1 ratio (mitigation:impact), not a 3:1 ratio. The applicant provided the correct 4:1 ratio in an updated response to of Data Request #12 (Calpine c*Power 2001c).

(BIO) City 13: The biology assessment "should evaluate possible potential impacts to nesting raptors or any special status bat species due to the removal of trees or demolition of existing structures". Appropriate mitigation should be included for any possible significant impacts.

Response: Staff discussed this information in Item A of the Analysis and Impacts section and Proposed Conditions of Certification section of this document.

(BIO) City 14: The biology assessment to should evaluate the potential for increased bird collisions with the proposed 90-foot tall exhaust stacks.

Response: Staff discussed this information in Item A of the Analysis and Impacts section of this document.

(BIO) City 15: The biology assessment should evaluate any impacts to the proposed Coyote Creek Riparian Corridor from the LECEF lighting plan.

Response: Staff discussed this information in Items A and B of the Analysis and Impacts section, in the Cumulative Impacts section, and in the Compliance with LORS section of this document.

The City of San Jose provided comments and questions regarding several items in the Biological Resources Staff Assessment published on December 31, 2001. The letter to staff was dated January 12, 2002 (City of San Jose 2002). The majority of comments requested more specific information on the storm drain outfall in Coyote Creek (SJ-17, SJ-19, SJ-22, and SJ-24). The applicant provided this information on January 11, 2002 in a supplement to the Data Requests (Calpine c*Power 2002), and staff has incorporated all relevant information into this document. Additional information on critical habitat for steelhead trout (SJ-16) and chinook salmon, and the use of the site by burrowing owls (SJ-20) and the birds from the Don Edwards Wildlife Refuge (SJ-18) was added to this document at the City's request.

SJ-25 On page 4.2-27, second paragraph, it is stated that construction of LECEF would result in a permanent removal of 13.5 acres of habitat. In discussing mitigation for this habitat, the SA needs to more clearly state how this will be accomplished. Several options are listed as available, that "should" be implemented (4.2-33) but no specific plan on how this will be accomplished. The conditions of certification included (BIO-11) are vague in description, again use "should", and do not detail how mitigation for habitat impacts will be implemented. In addition, the SA needs to clearly conclude if implementation of the project would result in both project specific and cumulative significant impacts (4.2-40 first paragraph), after mitigation.

Response: Staff has added to our discussion of impacts to the burrowing owl, and has found no significant project specific or cumulative impacts remain after mitigation. Staff continues to give the applicant several mitigation options for compensating for burrowing owl habitat loss, all of which mitigate to the same level. The applicant's purchase of burrowing owl mitigation lands will be verified by staff and CDFG as part of the Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP).

CITY OF MILPITAS

In their comments on the Staff Analysis, the City of Milpitas is concerned that the Staff Analysis does not differentiate from a project built with and without U.S. DataPort (City of Milpitas 2002). The intent of this testimony is to analyze both scenarios, so additional wording and formatting has been added to clarify which potential impacts would occur with or without U.S. Dataport.

CONCLUSIONS AND RECOMMENDATIONS

The Applicant has successfully reduced construction-related impacts to biological resources to a very low level of likelihood by siting the proposed simple-cycle plant on a previously disturbed site and in a location where linears would be short. However, indirect impacts to sensitive species on the contiguous parcels are likely. In particular, both CDFG and the City of San Jose have expressed that impacts to burrowing owls should be reviewed and mitigated in this Staff Assessment. The City of San Jose in the U.S. DataPort EIR, which is a closely related project, determined the loss of burrowing owl habitat cannot be mitigated to less than significant levels because of the lack of lands available for purchase. To date, multiple surveys (June 14, 20, and 27, 2000 and October 12, 2001) have not found burrowing owls on site, along linears, or on the 55-acre parcel, and the likelihood of a direct project specific impact to this species is unlikely. Staff recognizes that burrowing owls could move onto the site at any time, but pre-construction surveys and avoidance should be adequate to mitigate all potential direct or indirect impacts. Staff agrees with previous analyses, and concludes LECEF is contributing to a cumulatively significant impact to a population of burrowing owls, but the impact to this species on a statewide basis can be mitigated by Biological Resources condition of certification **BIO-11**.

Direct or indirect impacts to serpentine endemics is difficult to detect because of LECEF's low emission levels and the distances between the power plant and the nearest serpentine soils area. Research has shown that nitrogen deposition at ambient levels is an impact to bay checkerspot butterfly, and management of these lands is needed to protect this species (Weiss 1999). In light of the need to protect and manage lands for this species, and the potentially significant cumulative impact the project in combination with others could have on the butterfly through nitrogen deposition, staff has recommended that the applicant purchase lands as habitat compensation (Biological Resources condition of certification **BIO-16**). The establishment of a preserve with a management plan is the best way to ensure that land is permanently preserved for the butterfly in the future and to ensure the proper grazing to benefit the

host plant of the butterfly is being implemented. Implementation of such a measure would reduce impacts to bay checkerspot butterfly to less than significant levels.

Construction of a permanent outfall on the interior side of the Coyote Creek levee has the potential to disturb avian species and degrade water quality, but would not significantly impact riparian habitat or wetlands. This portion of Coyote Creek supports many state and federally protected species. Measures have been proposed by staff to reduce these impacts to less than significant levels (see Biological Resources conditions of certification **BIO-10** and **BIO-15** and **SOIL AND WATER RESOURCES** section). ~~Staff has requested information on wetlands in the construction area and will present our analysis in an addendum to this Staff Analysis.~~

The USFWS has taken a position that consultation is necessary for the "take" of bay checkerspot butterfly and other serpentine endemics under the Endangered Species Act as amended (Act). The applicant has taken the position that the impacts are immeasurable and they do not intend to enter consultation. No federal permit authority has been confirmed for the project, so the decision to consult is voluntary. Operation of the simple-cycle power plant could result in the USFWS filing and action in court that the applicant is in violation of the Act. Such a filing would be based on the emission calculations presented in the applicant's November 20 and December 11, 2001 Data Responses. The USFWS has only recently begun review of the December 11, 2001 Data Responses and staff is uncertain if they will change their current position based on the new data.

Overall, project specific and cumulative impacts to~~in~~ biological resources have been reduced to less than significant levels. Staff recommends the following conditions of certification be adopted to avoid significant impacts to biological resources. ~~The items which remain outstanding could result in adverse impacts, but staff is confident these can be adequately mitigated to less than significant levels. The items needed prior to the biology staff issuing a final conclusion include:~~

~~- A complete description of biological resources along the temporary line from the onsite substation to Zanker Road and any pull and laydown sites;~~

~~- A more complete description of wetland and biological resources on the interior side of the levee wall at Coyote Creek;and,~~

~~- Information on all population sites of Santa Clara County's listed serpentine plants which may be affected by this project.~~

PROPOSED CONDITIONS OF CERTIFICATION

Staff recommends the applicant be held to the following Biological Resources Conditions of Certification:

DESIGNATED BIOLOGIST

BIO-1 Site and related facilities (including any access roads, transmission lines, water and gas lines, storage areas, staging areas, pulling sites, substations, wells, etc) mobilization activities shall not begin until an Energy Commission CPM approved Designated Biologist is available to be on-site.

Protocol: The Designated Biologist must meet the following minimum qualifications:

1. Bachelor's Degree in biological sciences, zoology, botany, ecology, or a closely related field;

2. Three years of experience in field biology or current certification of a nationally recognized biological society, such as The Ecological Society of America or The Wildlife Society;

3. At least one year of field experience with biological resources found in or near the project area; and

4. An ability to demonstrate to the satisfaction of the CPM the appropriate education and experience for the biological resources tasks that must be addressed during project construction and operation.

If the CPM determines the proposed Designated Biologist to be unacceptable, the project owner shall submit another individual's name and qualifications for consideration. If the approved Designated Biologist needs to be replaced, the project owner shall obtain approval of a new Designated Biologist by submitting to the CPM the name, qualifications, address, and telephone number of the proposed replacement. No habitat disturbance will be allowed in any designated sensitive areas until the CPM approves a new Designated Biologist and the new Designated Biologist is on-site.

Verification: At least 35 days prior to the start of any site and related facilities mobilization activities, the project owner shall submit to the CPM for approval the name, qualifications, address, and telephone number of the individual selected by the project owner as the Designated Biologist. If a Designated Biologist is replaced, the information on the proposed replacement as specified in the Condition must be submitted in writing at least ten (10) working days prior to the termination or release of the preceding Designated Biologist.

DESIGNATED BIOLOGIST DUTIES

BIO-2 The CPM approved Designated Biologist shall perform the following during any site and related facilities mobilization, construction, and operation activities:

1. Advise the project owner's Construction/Operation Manager, supervising construction and operations engineer on the implementation of the biological resources Conditions of Certification;

2. Supervise or conduct mitigation, monitoring, and other biological resources compliance efforts, particularly in areas requiring avoidance or containing sensitive biological resources, such as wetlands and special status species; and

3. Notify the project owner and the CPM of any non-compliance with any biological resources Condition of Certification.

Verification: During site and related facilities mobilization and construction, the Designated Biologist shall maintain written records of the tasks described above, and summaries of these records shall be submitted along with the Monthly Compliance Reports to the CPM. During project operation, the Designated Biologist shall submit record summaries in the Annual Compliance Report.

DESIGNATED BIOLOGIST AUTHORITY

BIO-3 The project owner's Construction/Operation Manager shall act on the advice of the Designated Biologist to ensure conformance with the Biological Resources Conditions of Certification.

Protocol: The project owner's Construction/Operation Manager shall halt, if necessary, all construction or operation activities in areas specifically identified by the Designated Biologist as sensitive to assure that potential significant biological resource impacts are avoided.

The Designated Biologist shall:

1. Inform the project owner and the Construction/Operation Manager when to resume construction or operation, and

2. Advise the Energy Commission CPM if any corrective actions are needed or have to be instituted.

Verification: Within two working days of a Designated Biologist notification of non-compliance with a Biological Resources Condition of Certification or a halt of construction or operation, the project owner shall notify the CPM by telephone of the circumstances and actions being taken to resolve the problem or the non-compliance with a condition. For any necessary corrective action taken by the project owner, a determination of success or failure will be made by the CPM within five working days after receipt of notice that corrective action is completed, or the project owner will be

notified by the CPM that coordination with other agencies will require additional time before a determination can be made.

WORKER ENVIRONMENTAL AWARENESS PROGRAM

BIO-4 The project owner shall develop and implement a CPM approved Worker Environmental Awareness Program in which each of its employees, as well as employees of contractors and subcontractors who work on the project or related facilities during site mobilization, construction and operation, are informed about sensitive biological resources associated with the project.

Protocol: The Worker Environmental Awareness Program must:

1. Be developed by or in consultation with the Designated Biologist and consist of an on-site or training center presentation in which supporting written material is made available to all participants;

2. Discuss the locations and types of sensitive biological resources on the project site and adjacent areas;

3. Present the reasons for protecting these resources;

4. Present the meaning of various temporary and permanent habitat protection measures; and

5. Identify whom to contact if there are further comments and questions about the material discussed in the program.

The specific program can be administered by a competent individual(s) acceptable to the Designated Biologist.

Each participant in the on-site Worker Environmental Awareness Program shall sign a statement declaring that the individual understands and shall abide by the guidelines set forth in the program materials. The person administering the program shall also sign each statement.

Verification: At least ~~60~~ 30 days prior to the start of any site and related facilities mobilization, the project owner shall provide two copies of the Worker Environmental Awareness Program and all supporting written materials reviewed or prepared by the Designated Biologist and the name and qualifications of the person(s) administering the program to the CPM for approval. The project owner shall state in the Monthly Compliance Report the number of persons who have completed the training in the prior month and a running total of all persons who have completed the training to date. The signed statements for the mobilization and construction phase shall be kept on file by the project owner and made available for examination by the CPM for a period of at least six months after the start of commercial operation. During project operation, signed statements for active project operational personnel shall be kept on file for six months, following the termination of an individual's employment.

STREAMBED ALTERATION AGREEMENT

BIO-5 Prior to start of any site or related facilities mobilization activities of the interior side of the levee, the project owner shall acquire a Streambed Alteration Agreement from the CDFG if required, or show CDFG correspondence which indicates no permit is required. The project owner will implement the agreement terms and conditions.

Protocol: Provisions in the CDFG Streambed Alteration Agreement include (typical measures are):

1. Completion of all work in the streams when the work sites are dry;

2. Not removing or damaging woody perennial stream bank vegetation outside of the work area;

3. Not removing soil, vegetation, and vegetative debris from the streambed or stream banks;

4. Not exceeding the amount of fill placed within stream channels above that which naturally occurred in the stream channel prior to the start of work;

5. Not creating silty or turbid water when water returns to the stream, and not discharging silty water into the stream, nor creating turbid water within the stream;

6. Stabilizing slopes toward the stream to reduce erosion potential;

7. Locating equipment, material, fuel, lubricant and solvent staging and storage areas outside the stream, and using drip pans with motors, pumps, generators, compressors, and welders that are located within or adjacent to a stream;

8. Moving all vehicles away from the stream prior to refueling and lubricating;

9. Preventing any substance that could be hazardous to aquatic life from contaminating the soil and/or entering the waters of the area;

10. Cleaning up all spills immediately; and

11. Returning stream low flow channel, bed, or banks to as nearly as possible to their original configuration and width.

Verification: At least 30 days prior to the start of any site or related facilities mobilization activities ~~of~~ on the interior side of the levee the project owner shall submit to the CPM a copy of the final CDFG Streambed Alteration Agreement or applicable CDFG correspondence. Agreement terms and conditions will be incorporated into the BRMIMP.

REGIONAL WATER QUALITY CONTROL BOARD CERTIFICATION

BIO-6 The project owner will acquire and implement the terms and conditions of the Regional Water Quality Control Board Section 401 State Clean Water Act certification, if ~~necessary~~required.

Verification: No less than 30 days prior to the start of any site or related facilities mobilization activities ~~of~~ on the interior side of the levee, the project owner will provide the CPM with a copy of the final Regional Water Quality Control Board (RWQCB) certification. The terms and conditions of the certification will be incorporated into the project's BRMIMP.

U. S. ARMY CORPS OF ENGINEERS SECTION 404 PERMIT

BIO-7 The project owner shall provide a final copy of the Section 404 permit, if ~~necessary~~required. The project owner will implement the terms and conditions contained in the permit.

Verification: No less than 30 days prior to the start of any site and related facilities mobilization of the interior side of the levee, the project owner shall submit to the CPM a copy of the permit required to fill on-site wetlands. Permit terms and conditions will be incorporated into the BRMIMP.

BIOLOGICAL RESOURCES MITIGATION IMPLEMENTATION AND MONITORING PLAN

BIO-8 The project owner shall submit to the CPM for review and approval a copy of the final BRMIMP and shall implement the measures identified in the plan. Any changes to the adopted BRMIMP must be made by the Energy Commission staff, in consultation with the USFWS and CDFG.

Protocol: The final BRMIMP shall identify:

1. All biological resources mitigation, monitoring, and compliance measures recommended by the Applicant, as well as those contained in the BIO-Condition of Certification (and other mitigation requirements);

2. All provisions specified in a CDFG Streambed Alteration Agreement;

3. All sensitive biological resources to be impacted, avoided, or mitigated by project construction, operation and closure;

4. All required mitigation measures for each sensitive biological resource;

5. Required habitat compensation strategy, including provisions for acquisition, enhancement, and management for any temporary and permanent loss of sensitive biological resources;

6. A detailed description of measures that will be taken to avoid or mitigate temporary disturbances from construction activities;

7. All locations, on a map of suitable scale, of laydown areas and areas requiring temporary protection and avoidance during construction;

8. Aerial photographs of all areas to be disturbed during project construction activities - one set prior to any site mobilization disturbance and one set subsequent to completion of mitigation measures. Include planned timing of aerial photography and a description of why times were chosen;

9. Duration for each type of monitoring and a description of monitoring methodologies and frequency;

10. Performance standards to be used to help decide if/when proposed mitigation is or is not successful;

11. All performance standards and remedial measures to be implemented if performance standards are not met;

12. A discussion of biological resources related facility closure measures; ~~and~~

13. A process for proposing plan modifications to the CPM and appropriate agencies for review and approval; and,

14. A detailed plan of the management of top soil (from onsite, laydown, and linear areas) during the construction phase.

Verification: At least 30 days prior to start of any site or related facility mobilization activities, the project owner shall provide the CPM with two copies of the draft final version of the BRMIMP for this project, and provide copies to the USFWS and CDFG. The CPM, in consultation with the USFWS and CDFG, will determine the plan's acceptability within ~~forty-five~~ 15 days of receipt. The project owner shall notify the CPM no less than five working days before implementing any modifications to the BRMIMP to obtain CPM approval.

Within 30 days after completion of project construction, the project owner shall provide to the CPM, for review and approval, a written report identifying which items of the BRMIMP have been completed, a summary of all modifications to mitigation measures made during the project's construction phase, and which mitigation and monitoring plan items are still outstanding.

CLOSURE PLAN MEASURES

BIO-9 The project owner will incorporate into the planned permanent or unexpected permanent closure plan measures that address the local biological resources.

Protocol: The planned permanent or unexpected permanent closure plan will address the following biological resources related mitigation measures (typical measures are):

1. Removal of transmission conductors when they are no longer used or useful;

2. Removal of all power plant site facilities and related facilities;

3. Measures to restore wildlife habitat to promote the re-establishment of native plant and wildlife species; and,

4. Revegetation of the plant site and other disturbed areas utilizing appropriate seed mixture.

Verification: At least 12 months (or a mutually agreed upon time) prior to the commencement of closure activities, the project owner shall address all biological resources related issues associated with facility closure in a Biological Resources Element. The Biological Resources Element will be incorporated into the Facility Closure Plan and include a complete discussion of the local biological resources and proposed facility closure mitigation measures. The biological resources facility closure measures will also be incorporated into the BRMIMP.

MITIGATION MEASURES

BIO-10 The project owner will implement the mitigation measures identified below unless the mitigation measures conflict with mitigation required by the USFWS Biological Opinion.

Protocol: The project owner will:

1. Site transmission line poles, access roads, pulling sites, and storage and parking areas to avoid sensitive resources whenever possible;

2. Avoid all wetlands;

3. Design and construct transmission lines and poles to reduce the likelihood of electrocutions of large birds;

4. Implement the terms and conditions of a current CDFG Streambed Alteration Agreement (if ~~applicable~~required);

5. Implement a Worker Environmental Awareness Program;

6. Clearly mark construction area boundaries with stakes, flagging, and/or rope or cord to minimize inadvertent degradation or loss of adjacent habitat during facility construction/modernization. All equipment storage will be restricted to designated construction zones or areas that are currently not considered sensitive species habitat. Parking will not be allowed below the canopy of trees;

7. Provide a Designated Biologist to monitor all activities that may result in incidental take of listed species or their habitat;

8. Fence and provide wildlife escape ramps for construction areas that contain steep-walled holes or trenches. Fence will be hardware cloth or similar materials that are approved by the USFWS and CDFG;

9. Inspect trenches each morning for entrapped animals prior to the beginning of construction. Construction will be allowed to begin only after trapped animals are able to escape voluntarily;

10. Inspect all construction pipes, culverts, or similar structures with a diameter of 4-inches or greater for sensitive species (such as foxes) prior to pipe burial. Pipes to be left in trenches overnight will be capped;

11. Provide a post-construction compliance report, within forty-five (45) calendar days of completion of the project, to the Energy Commission CPM;

12. Make certain that all food-related trash will be disposed of in closed containers and removed at least once a week. Feeding of wildlife shall be prohibited;

13. Report all inadvertent deaths of sensitive species to the appropriate project representative. Injured animals will be reported to the CDFG, and the project owner will follow instructions that are provided by the CDFG;

14. ~~Avoid~~ Limit the use of ~~pesticides or herbicides~~biocides in project areas (see **BIO-17** for more detail); and

15. Implement erosion control in the temporary impact areas, especially near wetlands and waterways.

Verification: All mitigation measures and their implementation methods will be included in the BRMIMP. Two copies of the CPM approved BRMIMP must be provided to the CPM five days prior to site mobilization and copies provided to the USFWS and CDFG.

SURVEY AND PROVIDE HABITAT COMPENSATION FOR BURROWING OWLS

BIO-11 The applicant shall survey for burrowing owl activities on the 55-acre parcel and along all ancillary linears ~~30~~ 20 days prior to site mobilization to assess owl presence and need for further mitigation. All survey results shall be submitted to the CDFG. If owls are present, and nesting is not occurring, owls are to be removed per CDFG-approved passive relocation. Passive relocation is recommended from September 1 to January 31, to avoid disruption of breeding activities. If owls are nesting, nest(s) should be avoided by a minimum of a

250-foot buffer until fledging has occurred (February 1 through August 31). Following fledging, owls may be passively relocated.

If burrowing owls are found on the site or along all ancillary linears, on-site or off-site compensation for losses will be required, whichever is feasible. CDFG recommends 6.5 acres of protected lands for each pair of owls or unpaired resident bird. Foraging habitat should be replaced at 0.5:1 (mitigation:impacts). Mitigation lands bought outside of Santa Clara County shall be purchased at a 0.75:1 (mitigation:impacts) for contiguous counties and 1.5:1 for all other California counties. In addition, existing unsuitable burrows on the protected lands should be enhanced (e.g., cleared of debris or enlarged) or new burrows installed at a ratio of 2:1. If off-site compensation is the only option, the mitigation ratios will increase depending on the distance from the site and burrowing presence on or near the mitigation parcel.

Verification: ~~At least ninety (90) days prior to the start of any site and related facilities mobilization, the project owner shall provide the CPM with the final version of the BRMIMP, and the CPM will determine if the plan includes this measure. All modifications to the approved BRMIMP must be made only after consultation with Energy Commission staff, the USFWS, and CDFG. The project owner shall notify the CPM five working days before implementing any modifications to the BRMIMP.~~ At least ~~30~~ 15 days prior to the expected start of any project-related ground disturbance activities, the project owner shall provide the CPM and CDFG with the burrowing owl survey results and identify any lands proposed for mitigation (if applicable). The land purchase shall be approved by the CPM and reviewed by CDFG. The project owner shall notify the CPM five working days before implementing any modifications to the BRMIMP.

REPLACEMENT OF ORDINANCE AND NATIVE MATURE TREES

BIO-12 Prior to the start of any site mobilization, the project owner shall develop the Ordinance and Native Mature Tree Replacement Plan for inclusion into the BRMIMP. The protocol shall include a thorough discussion of methods, species, and location for plantings, criteria for success, a monitoring program for 5 years, and a reporting requirement. If the CPM determines that the plan requires modification, the project owner shall modify the report based on the CPM's comments.

Verification: At least ~~90~~ 30 days ~~-~~ prior to the start of any site and related facilities mobilization, the project owner shall provide to the CPM for review and approval, and to CDFG for review, a Ordinance and Native Mature Tree Replacement Plan as part of the BRMIMP.

CITY OF SAN JOSE ORDINANCE TREE

BIO-13 The project owner will acquire a City of San Jose permit to remove any remaining ordinance trees from the site. The number of trees removed will be minimized and construction equipment and linears in the dripline of these trees will be avoided. The applicant will be required to replace any trees removed at a ratio of 4:1 (mitigation:impact) per the U.S. DataPort EIR.

Verification: The terms and conditions of the City of San Jose permit(s) will be incorporated into the project's BRMIMP and submitted at least 90 days ~~prior to the start of any site and related facilities mobilization~~prior to removal of any remaining ordinance trees (or those not covered by the City of San Jose Planned Development Permit). A copy of the permit(s) should be included as an appendix to the BRMIMP.

REVEGETATION OF TEMPORARY DISTURBANCE

BIO-14 ~~Prior to use of the 20-acre laydown area, topsoil will be salvaged from the site and stockpiled at one end of the site.~~ After construction, the laydown area will be stripped of any armoring material, the surface scarified, and topsoil restored. Barley seed will be sowed as a temporary cover crop, but native seeds from the topsoil will be allowed to sprout and grow.

Verification: The applicant shall provide the revegetation plan in the BRMIMP and submit~~ted~~ it within ~~at least (90~~ (60) days ~~prior to~~after the start of any site and related facilities mobilization.

AVOID IMPACTS TO RIPARIAN COMMUNITIES

BIO-15 Construction of the permanent outfall to Coyote Creek shall be scheduled to avoid critical seasons. Surveys by a qualified biologist will be conducted prior to any construction activities on the interior side of the levee to locate nests and other resources in/or adjacent to the stormwater right-of-way. Designated existing roads will be used, and if such roads are not present, flagged routes that have been surveyed by a biologist will be used. If nests are observed, an avoidance period and buffer area shall be followed by all construction personnel. Construction plans will be submitted with a photo alignment sheet to the Energy Commission CPM for approval and to CDFG for review.

Verification: The applicant shall provide this measure as an amendment to the BRMIMP and as part of the roles for the Designated Biologist. Submittals of construction plans must occur 30 days prior to site mobilization on the interior side of the levee wall, but does not preclude the start of construction on the facility site. In lieu of CDFG review, the applicant may submit a copy of their final Streambed Alteration Agreement permit.

HABITAT COMPENSATION FOR SERPENTINE ENDEMICS

BIO-16 To compensate for impacts to serpentine soils and associated endemic species, the project owner shall provide a minimum of 40 acres of land within a high priority (as defined by USFWS) or occupied USFWS Critical Habitat Unit, the name of the entity that will be managing the land in perpetuity, and the endowment funds in the amount determined suitable from the Center for Natural Lands PAR analysis to administer and manage in perpetuity. Each of these must have been pre-approved by Energy Commission staff and USFWS.

Verification: Within one month of project certification, the project owner must provide to the CPM for approval, the name of the management entity, written verification that the compensation lands have been purchased and written verification that the

appropriate endowment fund (determined by the PAR analysis) has been received by the approved management entity.

LANDSCAPING PLAN

BIO-17 The applicant will complete a Landscaping Plan for review by the CPM.

Protocol: The Landscaping Plan must include measures which:

1. direct landscaping lights away from the riparian area;

2. limit the amounts of ~~pesticide and herbicide~~biocides used ~~and limit the selection of products to those specifically labeled for use adjacent to waterways~~on the project site;

~~2.direct facility and landscaping lights away from the riparian area;~~

~~3.~~3. remove invasive, non-native plants (e.g., yellow star thistle) whenever possible to avoid the spread of weeds to the riparian corridor buffer zone. Employ the most effective aspects of the following control methods: 1) manual removal and, 2) mechanical control through soil disturbance. If the previous two methods are unsuccessful in controlling the problem, the following method could be used: 3) herbicides with low environmental persistence, applied from ground-based equipment. These products should only be used within the parameters presented on the label;

4. ~~avoid~~avoid plant species that are not already found within the Coyote Creek watershed to avoid potentially new hybrids from cross-pollination;

~~4.~~5. select a drought-tolerant mix of native species for ground cover; ~~and~~

6. select a drought-tolerant mix of native tree species to the extent possible, particularly along the eastern edges of the landscaped areas (facing Coyote Creek);

~~5.~~7. avoid ~~or~~ long-term irrigation and limit short-term irrigation;

~~6.~~8. avoid landscaping species/design(s) which would require initial and/or future maintenance equipment that contribute to noise and/or air pollution; and

~~7.~~9. avoid the use of non-native ground cover (e.g., bark, rocks, soils).

Verification: At least 45 days prior to LECEF landscape installation, a Landscaping Plan will be sent to the CPM. All mitigation measures and their implementation methods will be included in the BRMIMP. Two copies of the ~~CPM-approved~~ BRMIMP must be provided to the CPM and one copy each provided to both the USFWS and CDFG five days prior to landscape instaillation.~~site mobilization and copies provided to the USFWS and CDFG.~~

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USFWS. 2001b. *Endangered and Threatened Wildlife and Plants: Final Determination of Critical Habitat for the California Red-legged Frog*. Federal Register: 66: 14626-14758. March 13.

USFWS. 2001c. *Endangered and Threatened Wildlife and Plants: Final Determination of Critical Habitat for the Bay Checkerspot Butterfly* (Euphydryas editha bayensis). Federal Register: 66: 21450-21489. April 30.

USFWS, 2001d. Sacramento Fish and Wildlife Office. Letter to Jim Brownell, California Energy Commission from Jan C. Knight. November 30.

USFWS. 2000. Draft Recovery Plan for California Red-legged Frog (*Rana aurora draytonii*). Portland, Oregon. 258 pp.

USFWS. 1998a. Recovery Plan for Serpentine Soil Species of the San Francisco Bay Area. Portland, Oregon. 330+ pp.

USFWS. 1998b. Availability of a Habitat Conservation Plan and receipt of an Application for and Incidental Take Permit for two Pacific Gas and Electric Company Projects, Santa Clara County, California. 63: 49364-49365.

Weiss,S. 1999. Cars, cows and checkerspot butterflies: nitrogen deposition and management of nutrient-poor grasslands for a threatened species. Conservation Biology 13(6): 1476-1486.

CULTURAL RESOURCES

Supplemental Testimony of Robin Palmer and Gary Reinoehl

Page 4.3-12 – **Verification for CUL-1**
Incorporate the marked changes:

(1) At least ~~45~~ 30 days prior to the start of ground disturbance, the project owner shall submit the name and statement of qualifications of its CRS and alternate CRS, if an alternate is proposed, to the CPM for review and approval.

Page 4.3-13 – **Verification for CUL-2**
Incorporate the marked changes:

(1) At least ~~forty~~ 30 days prior to the start of ground disturbance, the project owner shall provide the designated cultural resources specialist and the CPM with the maps and drawings.

Page 4.3-16 – **Verification for CUL-5**
Incorporate the marked changes:

(3) Within 24 hours of recognition of a non-compliance issue, the CRS shall notify the project owner and the CPM by telephone of the problem. ~~and of steps being taken to resolve the problem. The telephone call shall be followed by~~ The project owner shall provide an e-mail or fax detailing the non-compliance issue and the measures necessary to achieve resolution of the issue within 24 hours of the CRS notification. Daily logs shall include forms detailing any instances of non-compliance with conditions of certification. In the event of a non-compliance issue, a report written no sooner than two weeks after resolution of the issue that describes the issue, resolution of the issue and the effectiveness or the resolution measures, shall be provided in the next MCR.

Page 4.3-16 – **CUL-6**
Incorporate the marked changes:

For any cultural resource encountered, the project owner shall notify the CPM within 24 hours unless those resources are excluded by programmatic treatment.

Page 4.3-17 – **Verification for CUL-7**
Incorporate the marked changes:

At least ~~S~~seven days prior to implementing the testing program, the project owner shall provide the CPM with letter indicating the schedule of the proposed testing, including maps showing were test trenches will be placed.

HAZARDOUS MATERIALS

Supplemental Testimony of Alvin Greenberg, Ph.D.

Page 4.4-3, LORS, Local and Regional, Paragraph 3

Delete: "adapted"
Insert: " adopted"

Page 4.4-3, LORS, Local and Regional, Paragraph 3 (last sentenc)
Incorporate the marked changes:

The administering agency is the ~~Central Fire Department Santa Clara County and the~~ City of San Jose Fire Department.

Page 4.4-4, SETTING, Paragraph 2 before the last sentence

Insert: "The results of a Worst-case scenario of chemical release at the WPCP can be found in the Plant's Risk Management Plan (RMP). More information can be received from the Plant staff.

Page 4.4-10, RESPONSE TO AGENCY AND PUBLIC COMMENTS

Delete: "No comments were received."
Insert the following headings and comments:

AGENCY COMMENTS

The San Jose Fire Department

SJFD-1 The SJFD stated that they are the administering agency for the HMBP and not the Santa Clare County.

Response: It is Staff's understanding that the SJFD is a participating agency, and not the administering agency. Staff notes the comment, however, the wording in this analysis will remain until staff is presented with legal documentation to support this statement. The SJFD will have an opportunity to clarify the record at the evidentiary hearings.

SJFD-2 The SJFD disagrees with the statement on page 4.4-3 of this report that both the Central Fire Department Santa Clare County and the San Jose Fire Department are the administering agencies for the Uniform Fire Code, and comments that only the SJFD is the authority.

Response: Staff agrees with the comment, the correction is added to this report.

SJFD-3 The SJFD is concerned that the wording in **HAZ-2** would allow the applicant to not submit the HMBP if no RMP is sent to the USEPA.

Response: The wording in **HAZ-2** was revised to clarify this issue.

PROPOSED CONDITIONS OF CERTIFCATION

HAZ-2
Incorporate the marked changes:

The project owner shall provide a Risk Management Plan RMP (if required by regulation) to the CUPA and the CPM for review at the time the RMP plan is first submitted to the U.S. Environmental Protection Agency (EPA). ~~and a~~ A Hazardous Materials Business Plan HMBP (which shall include the proposed building chemical inventory as per the UFC) ~~shall also be submitted to the CUPA for review and to the CPM for review and approval prior to construction. to the San Jose Fire Department and the CPM for review at the time the RMP plan is first submitted to the U.S. Environmental Protection Agency (EPA).~~ The project owner shall include all recommendations of the ~~San Jose Fire Department~~CUPA and the CPM in the final ~~documents~~HMBP. A copy of the final ~~plans~~RMP, including all comments, shall be provided to the ~~City of San Jose~~ CUPA and the CPM once it gets the EPA ~~approval approves the RMP~~.

Verification for **HAZ-2**
Incorporate the marked changes:

At least 30 days prior to the commencement of construction of hazardous materials storage and containment structures, the project owner shall provide the final plans (RMP and HMBP) listed above to the CPM for approval.

HAZ-5
Incorporate the marked changes:

The project owner shall ensure that no combustible or flammable material is stored, or used, ~~or transported~~ within 100 feet of the sulfuric acid tank.

Verification for **HAZ-5**

Delete: "60"
Insert: "30"

Verification for **HAZ-6**

Delete: "60"
Insert: "30"

HAZ-8
Incorporate the marked changes:

The project owner shall require that the gas pipeline undergo a complete design review and detailed inspection ~~every~~ 30 years after initial startup and each five years thereafter.

Verification At least 30 days prior to the initial flow of gas in the pipeline, the project owner shall provide an ~~detailed~~ outline of the plan to accomplish a full and comprehensive pipeline design review to the CPM for review and approval.

The~~is~~ full and complete plan shall be amended, as appropriate, and submitted to the CPM for review and approval, not later than one year before the plan is implemented by the project owner. For subsequent inspections, the project owner shall provide to the CPM for review and approval any plan amendments, or a letter indicating there are non, at least one year before implementing the subsequent inspections.

LAND USE

Supplemental Testimony of Negar Vahidi

Page 4.5-5 – City of San Jose Zoning Ordinance (3rd paragraph)

Delete: "[for the PD rezone]"
Insert: "[for the LECEF portion of the PD rezone]"

Page 4.5-6 – LECEF Location and Site Characteristics (line 13)

Delete: "a City use permit"
Insert: "a City Demolition Permit"

Page 4.5-13 – The San Francisco Bay Trail (1st paragraph)

Incorporate the following changes:

Currently, there is no funding for ~~this project~~ the western branch of the Bay Trail and no timeframe for when it would occur. According to the City of San Jose, there is no official trail along the western levee of Coyote Creek, but recreationists use it as a bicycle route. The proposed Bay Trail on the levee is in no way connected to the US Dataport project (Rhys, 2001). It should be noted that the City of Milpitas has acquired funding for the eastern branch of the Bay Trail (which will serve as the route for the Juan Bautista de Anza National Historic Trail in the area) from the Bay Area Association of Governments and is in the design phase of the project. Construction is anticipated to begin in 2002 (City of Milpitas, 2002).

Page 4.5-19 – Height Restrictions (2nd paragraph)
Incorporate the marked changes:

A General Plan Amendment for the property of the proposed US Dataport project site modified the Alviso Master Plan to allow maximum building heights of 100 feet for the area located north of Highway 237 and approximately 2000 feet east of Zanker Road, which includes the proposed LECEF site (Stewart, 2001a). Based on the General Plan amendment, LECEF would be in compliance with all local height restrictions. ~~However, as of the writing of this Staff Assessment, Staff has been unable to determine whether the General Plan amendment would pertain to LECEF if the US Dataport project were never completed.~~

Page 4.5-20 – Tree Removal Policy (2nd paragraph)

Delete: "3:1 ratio"
Insert: "4:1 ratio"

Page 4.5-21 – Impact on Recreational Land Uses (1st paragraph)
Incorporate the marked changes:

> The Visual Resources Staff Assessment ~~analyzes~~ analyzed this ~~potentially significant visual~~ impact and ~~provides~~ provided mitigation measures to ~~help~~ reduce ~~any visual impacts to recreationists~~ it to less- than- significant levels. However, visual resources staff determined that even after mitigation the LECEF project without the US Dataport project would still "detract somewhat from the scenic and aesthetic qualities of the corridor". Nevertheless, this residual detraction does not represent a noncompliance with the policy since the impact would be less than significant. The City has stated to land use staff (Crabtree, 2002) that the General Plan policy should be interpreted such that only a substantial or significant impact to the scenic qualities of the corridor would result in noncompliance. Therefore, based on the mitigation provided by the visual resources staff, the LECEF project (with or without US Dataport) would be compliant with the City's *Trails and Pathways Policy No. 1.*

Page 4.5-25 – Cumulative Impacts (almost entire page)
Incorporate the marked changes:

> LECEF is planned as Phase I of the three-phase U.S. Dataport project, a 2.227 million gross square acre Internet data center. Based on the completion of US Dataport, a significant visual impact to proposed, planned and existing recreational trails is likely to occur, and therefore, the project has the potential to conflict with the City's General Plan *Trails and Pathways Policy No. 1*, which specifies, "new development adjacent to the Trails and Pathways should not compromise safe trail access nor detract from the scenic and aesthetic qualities of the corridor" (please refer to **Land Use Table 1** and **Land Use Table 3**, as well as the setting, for more information about stated policies and trails). However, the **Visual Resources** Staff Assessment ~~analyzes~~ analyzed this potentially significant cumulative visual impact and ~~provides~~ provided mitigation measures to help reduce any visual impacts to recreational trail users to less-than-significant levels.
>
> Visual resources staff determined that, even after mitigation, the LECEF project without the US Dataport project would still "detract somewhat from the scenic and aesthetic qualities of the corridor". Nevertheless, this residual detraction does not represent a noncompliance with the policy since the impact would be less than significant. The City has stated to land use staff (Crabtree, 2002) that the General Plan policy should be interpreted such that only a substantial or significant impact to the scenic qualities of the corridor would result in noncompliance. Therefore, based on the mitigation provided by the visual resources staff, the LECEF project (with or without US Dataport) would be compliant with the City's *Trails and Pathways Policy No. 1* and would not result in a significant cumulative impact. Further, the Bay Trail Master Plan for the City of San Jose (June 2001) indicates this piece of the trail is in the future, and clearly contemplates the presence of US DataPort as a land use.
>
> ~~Other than the potential visual impact to recreational trail users (which is expected to be mitigated to a less than significant level), tThe~~The proposed

project would not result in any significant cumulative land use impacts. The proposed project does not make a significant contribution to regional impacts related to new development and growth, such as population in-migration, increased demand for public services, expansion of public infrastructure, or loss of open space. The proposed project's contribution to land use impacts resulting from past, present, and probable future projects described in **Land Use Table 3** is not expected to be cumulatively considerable. The proposed project is consistent with the long-term plans of the City (Horwedel, 2001b; Horwedel, 2001c; Gonzales, 2001), and would not contribute to a cumulatively significant impact to the City's goals and plans for the area. Therefore, Staff concludes there are no significant cumulative land use impacts associated with the proposed project.

Page 4.5-26 – Response to Comments
Incorporate the following Staff responses to received comments:

CITY OF MILPITAS

MIL-1 San Jose General Plan, Urban Design Policy 7 states that the City should encourage undergrounding existing overhead distribution lines, except in the case of light rail transit vehicles and high-tension electrical transmission lines. The project is proposing overhead lines, but it is not clear whether this transmission line is of the high-tension variety.

Response: As noted on Page 4.5-7, in the discussion of *Linear Features*, the overhead lines for the proposed project would be temporary. Since the overhead lines would not be a permanent feature of the landscape, it would not be practical to underground them. In addition, the City of San Jose has repeatedly stated to land use staff that the proposed project would be consistent with the City of San Jose's land use policies (Crabtree, 2001a; Crabtree, 2001b; Horwedel, 2001a; Horwedel, 2001b; Horwedel, 2001c; Gonzales, 2001).Therefore, the City of San Jose would not be inclined to encourage the undergrounding of the temporary overhead lines, per its *Urban Design Policy 7*. Additionally, the lines, which would carry up to 115 kV, are high-tension wires.

MIL-2 Under the City of San Jose General Plan, Scenic Routes and Trails Diagram, the policies state that new development adjacent to trails and pathways corridors, such as the trails along both side of Coyote Creek, should not compromise safe trail access nor detract from the scenic and aesthetic qualities of the corridor. (See **LAND USE Table 1**.) This policy is not adequately analyzed. The LECEF project, by detracting from the natural riparian experience along Coyote Creek, seems in opposition to this policy.

Response: As noted on Page 4.5-20, *Impact on Existing Recreational Land Uses*, a *Trails and Pathways Corridor* runs approximately 750 feet to the east of the project in the Coyote Creek riparian area, which would make the City's *Trails and Pathways Policy No. 1* applicable to adjacent properties. Plans and policies associated with Visual Resources impacts have been fully evaluated in

the **VISUAL RESOURCES** section of this Staff Assessment. The Visual Resources Staff Assessment determined that the proposed project would not result in any unmitigated significant impacts to visual resources. However, visual resources staff determined that even after mitigation the LECEF project without the US Dataport project would still "detract somewhat from the scenic and aesthetic qualities of the corridor".

As discussed on Page 4.5-20, land use staff contacted the City of San Jose (Crabtree, 2002), which indicated that since there would be no significant visual resources impacts from the LECEF project (with or without US Dataport), the LECEF project would not violate the City's *Trails and Pathways Policy No. 1*. The City stated that the policy should be interpreted such that only a substantial or significant impact to the scenic qualities of the corridor would result in noncompliance. Therefore, based on the mitigation provided by the visual resources staff, the LECEF project (with or without US Dataport) would be compliant with the City's *Trails and Pathways Policy No. 1*

.MIL-3 *The discussion at page 4.5-11 should note that the trail alignment along the east side of Coyote Creek (in Milpitas) serves as both the Bay Trail and Juan Bautista de Anza National Historic Trail. Furthermore, the discussion incorrectly notes that the Bay Trail project is not yet funded. The City of Milpitas has prepared an alignment for the segment of the Bay Trail along the eastern side of Coyote Creek, received a grant from the Association of Bay Area Governments, and is currently proceeding with the design phase of the project. Construction is scheduled to begin in the fall of 2002. Obviously, this trail segment is of local, regional, statewide, and national importance, and the SA should thoroughly analyze the impacts of the LECEF on the trail.*

Response: The discussion on Pages 4.5-12 and 4.5-13 has been revised to reflect that, while the western branch of the Bay Trail remains unfunded, the City of Milpitas has acquired funding from the Bay Area Association of Governments to begin the design phase for the eastern branch of the Bay Trail (which will serve as the route for the Juan Bautista de Anza National Historic Trail). The land use analysis already acknowledged that the Bay Trail and the Juan Bautista de Anza National Historic Trail are of local, regional, statewide and national importance. Please refer to the visual resources Staff Assessment for an analysis of the proposed project's potential impact to the eastern branch of the Bay Trail.

MIL-4 *Community Character Policy 2 states that new developments should have architectural and landscaping qualities that maintain the "seaside" qualities of Alviso. The power plant will not have architectural elements that will have "seaside" qualities. It will look like an industrial and utilitarian facility. The Addendum should include an analysis of this policy.*

Response: The City of San Jose has stated to land use staff that the proposed project would comply with the General Plan designation for the site (Crabtree, 2001a; Crabtree, 2002). The proposed project site area has been designated light industrial by the City of San Jose General Plan, and the proposed power plant would be considered a light industrial use (Crabtree, 2001a). In addition, the WPCP already exists in the area between the proposed site and the downtown area of Alviso, and the City of San Jose has already approved other projects in the vicinity that would have similar industrial architectural and landscaping qualities, such as the US Dataport project and the Pacific Gas and Electric Substation project.

The proposed LECEF project would be located on the southeastern edge of the area covered by the Alviso Master Plan, and its construction would not significantly detract from the "seaside" qualities of the downtown Alviso area. As stated in the Alviso Master Plan, the *Community Character Policy No. 2* is intended to be supported by other "design guidelines and landscaping policies" in the Alviso Master Plan. These policies, such as the *Lands Outside of the Village Area – Guidelines for Industrial Development*, clearly indicate that industrial development is permissible in certain areas of the Alviso area. Therefore, the proposed project would not violate the *Community Character Policy No. 2*.

In addition, the visual resources staff did not determine that the LECEF project would result in any significant visual impacts. Please refer to the Visual Resources Staff Assessment for a more complete description of the aesthetic visibility of the project.

MIL-5 *In relation to Lands Outside of the Village Area Design Objective, the high-visibility project will not be attractive and is questionable whether it will fit in the context of the larger community.*

Response: The visual resources staff did not determine that the LECEF project would result in any significant visual impacts. Therefore, the LECEF project would not significantly disrupt the visual attributes of the area. Please refer to the Visual Resources Staff Assessment for a more complete description of the aesthetic visibility of the project.

MIL-6 *Light Industrial areas in the Alviso Master Plan allow a wide variety of industrial uses EXCEPT or EXCLUDING any uses with unmitigated hazardous or nuisance effects. It is not clear that the project will not have any unmitigated nuisance effects (visual, biological).*

Response: Please refer to the Biological Resources Staff Assessment and the Visual Resources Staff Assessment for any discussion of potential biological or visual nuisance effects.

MIL-7 *A General Plan amendment was required for the DataPort project (for heights above 100 feet); however, as mentioned in the SA, it is not clear if the amendment applies to the LECEF project. Has there been a determination*

whether the amendment does apply to the LECEF facility and if it does not apply, what will then be required?

Response: The discussion on Page 4.5-19 has been adjusted to specify that the General Plan amendment applies to the project site, and therefore it applies to the LECEF project.

MIL-8 *It is notable that the SA relies on the City of San Jose's future approval of the rezoning of the project for a consistency finding. (SA, p. 4.5-18.) The CEC is required to make an independent finding of consistency with LORS. Rather than relying on San Jose, the SA should include a determination that the project complies with each of the general plan policies listed in Land Use Table 1.*

Response: The City of San Jose has repeatedly stated to land use staff that the proposed property site would be quickly rezoned once the LECEF Staff Assessment is completed. Once the City's reviews this Staff Assessment it will make every effort to expedite the effectuation of the site's rezone, which will make the proposed project consistent with the City's Zoning Ordinance (Horwedel, 2001a; Horwedel, 2001b; Horwedel, 2001c; Gonzales, 2001). Therefore, any LORS non-compliance impacts with the City's land use and zoning designations would be less than significant.

MIL-9 *The SA notes that, although the land to be developed for the LECEF is currently shown on state maps as prime agricultural land, the Director of the Department of Conservation has determined that the land should be removed from the maps because of inactivity. Does the letter from the DOC represent the DOC's final action to reclassify the site?*

Response: As noted in the Department of Conservation's August 29, 2001 letter to the California Energy Commission, the site will be reclassified from "prime farmland" to "other land" in the 2002 Important Farmland Map of Santa Clara County. The Department of Conservation's map updating process is occurring now.

RESPONSE TO APPLICANT COMMENTS

Page 4.5-5; City of San Jose Zoning Ordinance, Third Paragraph: The discussion of the City of San Jose's use of the SA is not correct. The SA will be used by the City of San Jose for the LECEF portion of the PD Zoning approval. The City will use the certified EIR for the US Dataport project for its CEQA compliance for the Dataport part of the PD Zoning. They will rely on both documents for CEQA review.

Response: The discussion on Page 4.5-5 has been adjusted to reflect that the City of San Jose will use this Staff Assessment for the LECEF portion of the PD rezone.

Page 4.5-6; LECEF Location and Site Characteristics, Second Paragraph: The City of San Jose did not issue a Use permit for the demolition of the existing structures, but a Demolition permit.

Response: The discussion on Page 4.5-6 has been adjusted to read that the City of San Jose issued a Demolition Permit.

Page 4.5-19; Height Restrictions, Second Paragraph: The General Plan Amendment discussion in this paragraph is not correct. The General Plan Amendment applies to the property and not the project proposed.

Response: The discussion on Page 4.5-19 has been adjusted to read that the General Plan Amendment applies to the property.

Page 4.5-19; Environmental Review for the Rezone of the Planned Development, First Paragraph: The discussion of the City's use of the Staff Assessment is not correct. Please see the comments provided on this issue above.

Response: The discussion on Page 4.5-19 has been adjusted to reflect the changes described in A-3, above.

Page 4.5-20; Tree Removal Policy, First Paragraph: The Applicant has committed to replace significant trees at a 4 to 1 ratio.

Response: The discussion on Page 4.5-20 has been adjusted to reflect the applicant's commitment to replace trees at a 4 to 1 ratio.

Page 4.5-31 – References (most of page)
Incorporate the marked changes:

ABAG (Association of Bay Area Governments), 1999. ABAG Regional Goals and Policies. March 3, 1999. [online] http://www.abag.ca.gov/planning/rgp.

___. 1989. Bay Trail Plan. [online] http://www.abag.ca.gov/bayarea_info/baytrail/baytrailplan.html. July.

Applicant (Calpine c*Power Corporation). 2001. Personal email from Valerie Young, CH2MHill, that stated that the City of San Jose confirmed the proposed site was annexed from the County of Santa Clara on September 12, 2001. September 14.

Burkey, Steve. 2001. Personal communication regarding cumulative project list near the proposed project site. Mr. Burkey is an Associate Planner for the City of Milpitas Planning Department. November 2.

California Environmental Quality Act Guidelines. 2001. Title 14. California Code of Regulations Chapter 3. *Guidelines for Implementation of the California Environmental Quality Act*. October.

California Resources Agency, 1999. CERES Environmental Law, Regulation, and Policy: California Land Conservation Act (Williamson Act) June 21, 1999. [online] http://ceres.ca.gov/topic/env_law/williamson/stat.html.

California Public Resource Code. [online]

CCC (California State Coastal Conservancy), 1995. California Wetlands Information System: Williamson Act (Land Conservation Act of 1965) December 15, 1995. [online] http://ceres.ca.gov/wetlands/introduction/williamson.html.

City of Milpitas. 2002. Comments received from the City of Milpitas entitled, "Milpitas's Comments on the Staff Assessment of the Los Esteros Critical Energy Facility". January.

Page 4.5-32 – References (4th paragraph)

Insert: "Crabtree. 2002. Senior Planner, City of San Jose, Planning, Building, and Code Enforcement Department. Personal Communication with Marc Campopiano, Aspen Environmental Group, regarding the City of San Jose's Trails and Pathways Policy No. 1. January 18, 2002."

Page 4.5-33 – References (8th paragraph)

Incorporate the marked changes:
National Park Service Website. 2001. Juan Bautista De Anza National Historic Trail. [online] http://www.nps.gov/juba/. September 2001.

NOISE AND VIBRATION

Supplemental Testimony of Brewster Birdsall

Page 4.6-4 – **LORS, Local**, final sentence
Incorporate the marked changes:

> The maximum noise levels allowed by Section 20.20.300 of the Zoning Ordinance for uses in Agricultural Districts without a conditional use permit are as follows (measured at the adjacent property line):
>
> - 55 decibels adjacent to a property used or zoned for residential purposes,
> - 60 decibels adjacent to a property used or zoned for commercial purposes,
> - 70 decibels adjacent to a property used or zoned for industrial or use other than residential or commercial purposes.

Page 4.6-13 – **Impacts, Operational Noise**, first paragraph
Revise paragraph as follows:

> The City of San Jose specifically maintains riparian corridor noise policies that govern the amount of acceptable new noise affecting the Coyote Creek riparian corridor (Location 2). The riparian corridor policies specify that noise increases should not exceed noise levels for open space as specified in the Noise Element of the City of San Jose's General Plan or exceed background noise levels. However, the designation of the Coyote Creek riparian corridor as a public park means more stringent noise goals (60 Ldn) apply. Because only distant noise sources affect Location 2, background noise levels (59 Ldn ambient) are currently less than the noise levels permissible for public parks (60 Ldn). As shown in **NOISE Table 4 and Table 5**, noise from the LECEF would exceed the background noise levels by one decibel, but would not exceed the City's goal of 60 Ldn. Based on this information, the Energy Commission staff has concluded that the project noise effects on the riparian corridor would be less than significant.

Page 4.6-21 – end of **Response to Agency and Public Comment**
Add the following new comments and responses.

SJ-32 Page 4.5-8 Surrounding Land Use, Page 4.5-14 Sensitive Receptors, Page 4.5-16 Discussion of Impacts: Discussion on Cilker property. More analysis should be done on the impacts on the Cilker property since it is the closest sensitive receptor. Dataport has extended an option to purchase the property. So there is a chance that Dataport may not purchase the property. Although it is likely it will be replaced with industrial uses, some discussion needs to be included to explain why there would be no significant impact even if it were to stay.

Response – **NOISE Table 4 and Table 5** (SA, p. 4.6-12 and 13) show the impacts to the Cilker property (Location 7 in the SA). Discussion of the impacts begins on p. 4.6-16, and the Conditions of Certification (i.e**., NOISE-4**) specifically address this receptor.

SJ-39 Page 4.6-4 – 5. The City's Zoning Ordinance states that uses will be not allowed on commercial, agricultural, and industrial zoned parcels that exceed the listed thresholds (55 dBA residential, 60 dBA commercial, 70 dBA industrial) without a conditional use permit. Thus, these thresholds are not maximum noise levels allowed, except in residential zones.

Response – Comment noted on Page 4.6-4 with this Supplemental Testimony.

SJ-40 As stated in the Biotics section, the noise thresholds in the riparian corridor policy are 75 DNL (and background noise), not 60 DNL. (Page 4.6-13, second paragraph).

Response – Comment noted on Page 4.6-13 with this Supplemental Testimony.

SJ-41 Graphics showing noise impacts and contours from the project (as used in the US Dataport FEIR, pg. 111-112) would be preferred in illustrating the analysis and conclusions.

Response – Based on data in **NOISE Table 4 and Table 5**, the applicant agreed in the January 14 workshop to prepare a figure. As of January 29, staff has not received this figure.

SJ-42 If the applicant intends to modify the construction hours listed in the conditions of certification, these need to be disclosed and analyzed within this document. As the City intends to use the SA as the CEQA document for the project, any new noise impacts that were not evaluated within would constitute new impacts and subsequent CEQA analysis.

Response – The applicant agreed in the January 14 workshop to submit any anticipated construction scheduling changes. The Staff Assessment and Conditions of Certification are based on the proposal in the AFC (p. 8.5-19) that the noisiest construction activities would be confined to daytime hours. Condition of Certification NOISE-6 specifically addresses this by prohibiting noisy night construction as a "best management" practice (see also SA p. 4.6-4 and 4.6-10). Adjustments to this schedule would be negotiable with the Compliance Project Manager (CPM) following successful certification of the project. As of January 29, staff has not received any request from the applicant to allow noisy activity at night.

COMMENTS FROM THE CITY OF MILPITAS

MIL-38 It is not clear from the text whether the noise studies performed by the applicant were conducted as though the U.S. DataPort buildings were present or not. As discussed below, it is not proper to analyze the environmental effects of the LECEF by assuming the presence of the U.S. DataPort. It is clear that the studies performed by staff with regard to the Cilker property residences were performed as though the U.S. DataPort were not present. The Addendum should clarify this point. This issue is particularly important, since the increases in noise created by the project appear to bring noise levels right to the City's maximum noise standards. (See SA, p. 4.6-13.)

Response – The impacts discussion does not assume the presence of any U.S. Dataport structures (SA, p. 4.6-9 and 10).

Pages 4.6-23 to 24 – **Proposed Conditions of Certification**, Noise Restrictions Incorporate the marked changes:

NOISE RESTRICTIONS

NOISE-4: The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that operation of the project will not cause resultant noise levels to exceed the ambient average nighttime noise levels (L_{90}) at the main Cilker home by more than 5 dBA, and that the noise due to plant operations will comply with the noise standards of the City of San Jose public park policies (LORS) at Location 2 (60 Ldn). The closest permanent residential receptor is the landscaped yard of the main Cilker home if this property is not under the control of the project owner or U.S. Dataport. If this property is under the control of the project owner or U.S. Dataport, compliance is not required at the Cilker home.

No new pure tone components may be introduced. No single piece of equipment shall be allowed to stand out as a source of noise that draws legitimate complaints. Steam relief valves shall be adequately muffled to preclude noise that draws legitimate complaints.

Protocol:

A. Prior to initiating construction, the project owner shall conduct a 25-hour community noise survey at the main Cilker home to determine the ambient noise levels, if appropriate based on the above discussion.

B. Within 30 days of the project first achieving a sustained output of 80 percent or greater of rated capacity, the project owner shall conduct short-term survey noise measurements at the Coyote Creek riparian corridor. The short-term noise measurements shall be conducted during both daytime (7 a.m. to 10 p.m.) and nighttime (10 p.m. to 7 a.m.) periods. In addition, the project owner shall conduct a 25-hour

community noise survey at the main Cilker home, if appropriate. The survey during power plant operations shall also include measurement of one-third octave band sound pressure levels at each of the above locations to ensure that no new pure-tone noise components have been introduced.

C. If the results from the pre-construction and operational noise surveys indicate that the average nighttime (10 p.m. to 5 a.m.)background noise level (L_{90}) at the main Cilker home has increased due to power plant noise by more than 5 dBA, or that the noise standards of 60 Ldn have been exceeded at the Coyote Creek riparian corridor, mitigation measures shall be implemented to reduce noise to a level of compliance with these limits. Subject to CPM approval, mitigation measures at the Cilker home may include acoustical improvements such as sound rated windows and solid core exterior doors.

D. If the results from the pre-construction and operational noise surveys indicate that pure tones are present, mitigation measures shall be implemented to eliminate the pure tones.

Page 4.6-25 – **Proposed Conditions of Certification**, Construction Time Restrictions Incorporate the marked changes:

CONSTRUCTION TIME RESTRICTIONS

NOISE-6: Heavy equipment operation and noisy construction work shall be restricted to the times of day delineated below:

Any Day 6 a.m. to 8 p.m.

Noise due to pile driving shall be restricted to the times of day delineated below:

Any Day 8 a.m. to 5 p.m.

Haul trucks and other engine-powered equipment shall be equipped with adequate mufflers. Haul trucks shall be operated in accordance with posted speed limits. Truck engine exhaust brake use shall be limited to emergencies. Horizontal drill rigs may be operated on a continuous basis, provided that the rigs are fitted with adequate mufflers and engine enclosures, and that the rigs are shielded from view of residences by berms, straw bales, or other suitable barriers.

Verification: The project owner shall transmit to the CPM in the first Monthly Compliance Report a statement acknowledging that the above restrictions will be observed throughout the construction of the project. Any request from the project owner to deviate from these restrictions shall be transmitted to the CPM and the City of San Jose and shall be subject to CPM approval.

SOCIOECONOMICS

Supplemental Testimony of Dan Gorfain.

Response to Public Comments at the January 14, 2002 Workshop

Add the following new comments and responses:

The Applicant has asked that condition **SOCIO-1** be eliminated or modified as unnecessary in the Bay Area since the entire 9-county Bay Area should be considered "local" for purposes of preferential hiring and procurement.

Response: This is a standard condition included in other power plant actions by the Commission. In preparing and presenting the Socioeconomic analysis of the LECEF, staff recognized that the economy of the Bay Area is intertwined and that potential environmental impacts of this and similar projects go beyond the immediate city and county boundaries. Therefore, labor force for the project and procurement of materials and services should be considered from a regional perspective.

Staff has inquired with Santa Clara County and the City of San Jose regarding their position on the Applicant's request. The only request came from the City which urged that the LECEF be conditioned by the CEC in a manner consistent with other projects (Kutras, 2002 and Gurza, 2002).

Staff recommends that Condition of Certification **Socio-1** be modified to read:

Socio-1 The project owner and its contractors and subcontractors shall recruit employees and procure materials and supplies within the Bay Area unless:

- To do so would violate federal and/or state law;
- The materials and/or supplies are not available;
- Qualified employees for specific jobs or positions are not available; or
- There is a reasonable basis to hire someone for a specific position from outside the Bay Area.

Verification: At least 60 days prior to the start of construction, the project owner shall submit to the Energy Commission CPM copies of contractor, subcontractor, and vendor solicitations and guidelines stating hiring and procurement requirements and procedures. In addition, the project owner shall notify the CPM in each Monthly Compliance Report of the reasons for any planned procurement of materials or hiring outside the Bay Area that will occur during the next two months.

Mr. William Garbett, an intervener of behalf of T.H.E. P.U.B.L.I.C. said that there was an "equity issue" regarding School Impact Fees since, George Mayne School, the closest school to the LECEF site, is in the Santa Clara County Unified School District and the fees would be paid to the City of San Jose Unified School District.

Response: While the proposed LECEF will be located in the City of San Jose, it will also be located within the boundary of the Santa Clara County Unified District. The San Jose Unified School District does not include all of the City of San Jose. The LERCEF School Impact Fees will be paid to the Santa Clara County Unified School District in which the George Mayne School is located.

For the References Section of the SA, please enter the following:

Beetle, Wendy, 2002. Telephone communication between Wendy Beetle, Santa Clara County Controller's Office and Dan Gorfain, Aspen Environmental Group. January 22, 2002.

Gurza, Renee, 2002. Telephone communication between Renee Gurza, Senior Deputy City Attorney, City of San Jose and Dan Gorfain, Aspen Environmental Group. January 23, 2002.

Kutras, Pete, 2002. Telephone communication between Pete Kutras, Assistant County Executive, Santa Clara County and Dan Gorfain, Aspen Environmental Group. January 25, 2002.

Kutras, Pete, 2002. E-mail communication from Pete Kutras, Assistant County Executive, Santa Clara County and Dan Gorfain, Aspen Environmental Group. January 28, 2002.

SOIL AND WATER RESOURCES

Supplemental Testimony of John Kessler and Joe Crea

Page 4.9-3 – Tertiary Wastewater Treatment Permit (Line 1)

Delete: "Title 23"
Insert: "Title 22"

Page 4.9-3 – City of San Jose (Line 2)

Delete: "Recycled Water Use Permit"
Insert: "User Agreement for Recycled Water"

Page 4.9-5 – end of **Regional and Vicinity Description**

Insert: "In the event that PG&E's Los Esteros Substation is not completed in a timely manner, a temporary Transmission Line consisting of approximately 2,000 lineal feet of 115 kV overhead line would be constructed. The temporary Transmission Line would connect to PG&E's Trimble-Nortech 115 kV Transmission Line adjacent to Zanker Road near State Route 237, and would extend eastward to the LECEF Switchyard, via wood poles and averaging spans of approximately 200 lineal feet."

Page 4.9-6 – <u>last paragraph of</u> Groundwater

Replace the last paragraph with:

"There were six wells located on the 55-acre parcel acquired by the Applicant, although none are located on the LECEF site. The Applicant has destroyed five of the wells under a permit from the SCVWD and consistent with a demolition directive from the City of San Jose. One well will remain operative through the LECEF construction operation to meet water needs for dust suppression, compaction, and truck wheel washing. The remaining well will also be destroyed following construction."

Page 4.9-8 – Storm Water

First Paragraph, Third Sentence: Replace "eventually drains" with "appears to drain".

Third Paragraph, First Sentence: Delete "through an oil/water separator"

Page 4.9-10 – A. Impacts to Water Quality Standards or Waste Discharge Requirements

Insert before the last sentence:

"As for changes in the nitrate concentration, the additions from the LECEF would likely result in a 0.67 percent increase (worst case), a 0.41 percent increase (average case), or a 0.20 percent increase (best case). The effluent nitrate concentrations were assumed to be 34.90 mg/L (206 gpm, 108ºF, 3.61 lb

NO_3/hour as worst case), 36.57 mg/L (121.5 gpm, 60ºF, 2.22 lb NO_3/hour as average case), and 38.44 mg/L (90.13 gpm, 31ºF, 1.73 lb NO_3/hour as best case) thereby allowing for a 50 percent decrease of LECEF-derived nitrate as it passes through the WPCP. The WPCP was originally assumed to have 11.9 mg/L nitrate at 130 mgd (538 lb NO_3/hour)."

Page 4.9-10 – B. Groundwater Supply Depletion or Groundwater Recharge Interference

Replace the paragraph with:

"The LECEF proposes to use groundwater only during construction activities for dust suppression, compaction, and truck wheel washing. The use of recycled water during the LECEF operations will have no effect on groundwater supply. Therefore, groundwater supplies will not be impacted. There are six wells located on the 55-acre parcel acquired by the Applicant; however, none are located on the 15-acre LECEF site. Five of these wells have already been destroyed. The one remaining well, which is intended to supply water during the LECEF construction, will be destroyed following completion of construction in accordance with the SCVWD's Ordinance 90-1 as specified in condition of certification **SOIL AND WATER-5**."

Page 4.9-12 – D. Alteration of Existing Drainage Patterns Causing Erosion of Siltation

Delete in the last sentence of the fifth paragraph: ", through an oil/water separator, and"

Page 4.9-13 – F. Creation of Runoff Exceeding Stormwater Drainage Systems, or Providing Sources of Polluted Runoff

Delete in the first sentence of the second paragraph: "through an oil/water separator"

Page 4.9-14 – G. Otherwise Degrade Water Quality

Insert in the beginning of the second paragraph: "Based on recommendations from a Phase II Supplemental Site Assessment, the LECEF site has been remediated of any potentially significant concentrations of contaminated soil (See Waste Management and Worker Safety)."

Incorporate changes in the next sentence: "Upon construction, the LECEF site will be largely covered by buildings and paving, and ~~the~~any residual DDT levels…"

Page 4.9-15 – I. Flow Impediment or Redirection Due to Placement of Structures in Flood Hazard Areas

Insert at the end of the paragraph: "The proposed routes for linear facilities, including the temporary transmission line, would not be located within any watercourses; therefore not impacting surface water flows."

Page 4.9-16 – Response to Agency and Public Comments
Under SCVWD-3 Response:

Delete: "Staff is not aware of the Applicant's response to this request."
Insert: "Staff has included this information under Discussion of Impacts **– A. Impacts to Water Quality Standards or Waste Discharge Requirements**."

Page 4.9-17 – Response to Agency and Public Comments

After **CITY-41**, Insert new comment and response:

CITY-44 The City of San Jose (City) indicated that recycled water supply may experience interruptions of up to 72 hours, and that any backup system should provide 72 hours of supply.

Response: During the November 6, 2001 Data Request and Issues Workshop, the Applicant clarified that based on its discussions with the City of San Jose, that although there had been a previous event of 72-hours interruption in the City's recycled water supply, that at the time, the event could have been managed to reduce the extent of service interruption. And for that particular event, had there been customers who were dependent on continuous supply, the event could have probably been managed to avoid exceeding 24 hours of interruption. As per a discussion between Charles Vosicka (applicant) and Joe Crea (CEC staff), LECEF would shutdown if a water supply interruption exceeded the standby supply of reclaimed water (Vosicka 2002).

Under COE-3 Response, incorporate the following changes:

"See Condition of Certification **Soil and Water-~~10~~ 11** which requires the project owner to file a pre-construction notice and obtain authorization under Nationwide Permit #'s 3 and 7 as needed."

After COE-3, Insert new PG&E-3:

PG&E-3 PG&E indicated that the staff assessment, as a whole, must address the potential environmental impacts caused by the temporary transmission line connecting the plant via the Trimble-Nortech 115 kV transmission line.

Response**:** See discussions added under Regional and Vicinity Description on Page 4.9-5, and Discussion of Impacts under Sections D and I on Pages 4.9-12 and 4.9-15, respectively.

Pages 4.9-19 – 4.9-21 - Proposed Conditions of Certification

Under **SOIL & WATER-4**, add after the first sentence:

The data shall include storm water runoff projections based on using HEC1 modeling techniques as requested by SCVWD.

Under **SOIL & WATER 4** – Verification, incorporate the marked changes:

"At least 60 days prior to site mobilization in the Coyote Creek levee, the Applicant shall submit all elements required for a Storm Water Discharge Permit to the CPM for review and approval, and to the SCVWD for review and comments.

Under **SOIL & WATER 5**, incorporate the marked changes:

SOIL & WATER-5: The applicant shall provide the CPM with all information/data necessary to satisfy the requirements of the Well Destruction Permit for removal and closure following construction of the one remaining ~~existing~~ water well~~s~~, consistent with the requirements of Santa Clara Valley Water District's (SCVWD's) Ordinance No. 90-1. ~~The project owner shall obtain staff approval prior to construction.~~

Under **SOIL AND WATER-6**, insert the underlined phrase in the first sentence:

SOIL & WATER-6: The project owner will install metering devices and/ or utilize meters installed by City of San Jose in order to record on a monthly basis …"

Under **SOIL & WATER-7**, incorporate the following changes:

SOIL & WATER 7: The applicant shall provide the CPM with all information/data necessary to satisfy the requirements of the User Agreement for Recycled Water ~~Use Permit for use of recycled water~~ under the South Bay Water Recycling (SBWR) Program.

Verification: At least 60 days prior to initial operation ~~site mobilization~~, the Applicant shall submit all elements required for the User Agreement for Recycled Water ~~Use Permit~~ to the CPM for review and approval and to the City of San Jose for review and comments.

Under **SOIL & WATER-9**, incorporate the following changes:

SOIL & WATER-9: The project owner shall provide the CPM with evidence of submitting an accepted Engineer's Report for Title 22 Reclamation Requirements to the CA Department of Health Services, as applicable for obtaining unrestricted use of recycled water.

Under **SOIL & WATER-10**, incorporate the following changes:

SOIL & WATER-10: The project owner shall provide the CPM with evidence of pre-construction notification and consultation with the Army Corps of Engineers regarding compliance with Nationwide Permit #'s 3 and 7, consistent with Section 404 of the Clean Water Act, ~~as applicable~~ if necessary for placement of the storm water outfall and/or the placement of scour armor in Coyote Creek. In association with obtaining authorization for use of Nationwide Permit #'s 3 and 7, the Applicant may be directed to obtain Section 401 Water Quality Certification from the State Water Resources Control Board.

Verification: At least 60 days prior to construction of the storm water outfall, the project owner shall submit to the CPM evidence of consultation with the Army Corps of Engineers (ACOE) and authorization from the ACOE regarding Nationwide Permits #'s 3 and 7 as needed to comply with Section 404 of the Clean Water Act. If Nationwide Permits #'s 3 and 7 are required, at least 60 days prior to construction of the storm water outfall, the project owner shall submit evidence to the CPM regarding Section 401 Water Quality Certification from the State Water Resources Control Board.

REFERENCES

Vosicka, Charles 2002. WRMS Engineering. Personal communication with Joe Crea, January 30, 2002.

TRAFFIC & TRANSPORTATION

SupplementalTestimony of Matthew G. Darrow, P.E.

Page 4.10-5: Paragraph 1. The last line should read as follows:

Construction of the proposed facility is anticipated to occur over a 4 to 6-month construction period ~~between December 2001 and May of 2002~~.

Page 4.10-8: Section D. Paragraph 2: This paragraph should be modified to read as follows:

Zanker Road north of SR 237 is a two-lane facility with no dedicated right turn lane at the proposed primary project access location. In the morning, a relatively high amount of construction traffic, including trucks, will try to enter the project site at the primary access road. Since motorists that normally travel northbound on Zanker Road at high speeds may not be expecting to find congestion due to vehicles entering the jobsite at this location, a traffic hazard could occur. The project owner shall be required to install ~~a temporary dedicated right turn pocket with 150 feet of queue storage along the eastside shoulder of Zangker Road~~ and illuminate temporary construction zone warning signs along Zanker Road (see condition of certification **TRANS-2**) in order to alert unsuspecting motorists of the possibility of this congestion. ~~This right turn pocket will not need to be a permanent part of the City of San Jose road system and should be constructed in a way that it can be easily removed after construction is complete. This turn pocket does not need to be paved.~~ The project owner shall coordinate with the City of San Jose and CHP a temporary speed limit reduction through the construction zone.

The need for this Condition of Certification stems from the increased construction staff and delivery vehicles that will access the job site at the primary entrance.

~~The need for the temporary right turn pocket stems from the increased construction staff and delivery vehicles that will access the jobsite at the primary entrance. This temporary right turn pocket is not intended to mitigate hazardous material deliveries.~~

~~The Applicant has indicated its intent to comply with all weight and load limitations on state and local roadways, in order to prevent traffic and roadway hazards related to overweight and oversize loads. Condition of certification TRANS-2 will mitigate this potential impact to a less than significant level.~~

Page 4.10-12: The **CONCLUSIONS** paragraph should read as follows:

Provided that the Applicant develops a construction traffic control and implementation program, develops construction zone signage and implementation plan, ~~constructs a dedicated right-turn lane on Zanker Road,~~ and follows all LORS acceptable to the City of San Jose, County of Santa Clara, and Caltrans for the handling of hazardous materials, the project will result in less than significant impacts.

Page 8.10-13: Condition of certification, **TRANS-1**, third bulleted point for inclusion in the program plan should read as follows:

- route all heavy vehicles and vehicles transporting hazardous materials as follows: from SR 237 exit northbound at Zanker Road and turn right to enter the Los Esteros Critical Energy Facility via the primary access road when constructed; and

Page 4.10-12: The first line of the **verification** for **TRANS-1** should read:

Verification: At least ~~30~~ 15 days prior to start of site preparation or earth moving activities, the project owner shall provide to the City of San Jose, County of Santa Clara, and Caltrans for review and comment, and to the CPM for review and approval, a copy of their construction traffic control plan and transportation demand implementation program. ~~Additionally, every 2 months during construction the project owner shall submit turning movement and traffic volumes at the project access roads during the A.M. (7:00 to 9:00 a.m.) and P.M. (4:00 to 6:00 p.m.) peak hours to confirm construction trip generation rates identified in the AFC, and to determine that any impacts to City, County, and State transportation facilities are kept at an insignificant level.~~

Page 4.10-14: TRANS-2 and **verification** should read as follows:

TRANS-2 The project owner shall develop ~~construct~~ a temporary construction zone signage and implementation plan in accordance with the *Manual of Traffic Controls for Construction and Mainentance of Work Zones* (Caltrans, 1996). *This plan shall alert motorists to possible construction hazards that may occur on Zanker Road in the vicinity of the primary access road. The project owner shall keep in mind that all posted signs shall be illuminated since night work is anticipiated. The project owner shall coordinate with the City of San Jose and CHP a temporary speed limit reduction through the construction zone*~~dedicated right turn pocket along the eastside shoulder of northbound Zanker Road with a minimum of 150 feet of storage for access to the proposed LECEF facility at the primary access road north of SR 237. This right turn pocket will not need to be a permanent part of the City of San Jose road system and should be constructed in a way that it can be easily removed after construction is complete. This turn pocket does not need to be paved.~~

Verification: At least ~~seven~~ 10 days prior to the start of site preparation or earth moving activities, the project owner shall coordinate approval of the plan with ~~demonstrate to~~ the City of San Jose and CHP. Prior to the beginning of construction the owner shall demonstrate that the temporary construction zone signage has been installed and adequately illuminated. ~~county of Santa Clara that the temporary dedicated right pocket has been constructed along the eastside shoulder of Zanker Road.~~

TRANSMISSION LINE SAFETY AND NUISANCE

Supplemental Testimony of Obed Odoemelam, Ph.D.

Page 4.11-12: The following proposed condition of certification **TLSN-2**, has been modified to provide clarity regarding the necessary line measurements for the Los Esteros Project. The verification remains unchanged.

TLSN-2 The project owner shall engage a qualified consultant to measure the strengths of the magnetic fields from the PG&E's ~~15kV grid lines to be used in distributing the power from LECEF to the area's population centers~~ interconnection point to LECEF swithchyard. Measurements shall be made at the same points (identified as Points A, B, C, and D) for which calculated field strength measurements were provided by the applicant.

Verification: The project owner shall file copies of the pre-and post-energization measurements with the CPM within 60 days after completion of the measurements.

VISUAL RESOURCES

Supplemental Testimony of Michael Clayton

Page 4.12-13 (2nd to last paragraph on the page) **-** The discussion of KOP 2 under "Without U.S. DataPort as Part of the Environmental Setting" is hereby revised to read as follows:

> "The overall visual change that would be experienced at KOP 2 would be moderate. When viewed from KOP 2 on Zanker Road, the visual contrast caused by the project's complex, industrial-appearing structures would be moderate-to-high (see **VISUAL RESOURCES Figure 10**). The structures would appear co-dominant with the foreground level fields and the rolling landform of the East Bay Hills in the background. Project-induced view blockage of the East Bay Hills would be low-to-moderate. The project would be outside of the primary north-south cone of vision for motorists on Zanker Road and panoramic views across the site would not be significantly impaired. In the context of the moderate visual sensitivity at KOP 2, the resulting visual impact on Zanker Road would be adverse but not significant. It should also be noted that the PG&E proposed Los Esteros 230 kV Electric Substation would be visible immediately adjacent and to the north (to the left in Figure 10) of the proposed project. The substation would have an industrial character similar to that of the proposed project."

As a result of the new plume modeling analysis conducted by staff, the following changes are hereby incorporated into the **VISUAL RESOURCES** section:

a. The reference to Birdsall 2001 under "Combustion Turbine and Cooling Tower Exhaust Plumes" on page 4.12-9 is hereby changed to read Birdsall 2002.

b. The third and fourth sentences of the Cooling Tower Plume discussion presented as the last paragraph on page 4.12-9 are hereby revised to read as follows:

> "As shown in **Table 1** below, staff's modeling analysis (Birdsall 2002) indicates that a relatively low frequency of plume formation would occur as a result of the proposed cooling towers. The cooling tower plumes would occur approximately 16 percent of all daylight hours and approximately 21 percent of all seasonal daylight hours (seasonal daylight hours are those daylight hours during the months [November to April] when conditions conducive to plume formation are most prevalent)."

c. Table 1 on page 4.12-10 is hereby replaced with the following Table 1:

Table 1
Staff Predicted Hours with
Cooling Tower Visible Plumes

	Available Hours	Unabated Cooling Tower	
		Total	Percent*
All Hours	43,630	10,632	24.4%
Daylight Hours	22,270	3,449	15.5%
Seasonal Daylight Hours	9,930	2,110	21.3%
Seasonal hours occur from November through April			

d. The first paragraph on page 4.12-10 is hereby revised to read as follows:

"**Table 2** provides the cooling tower plume dimensions for the 10 percent frequency plume during all hours and seasonal daylight hours. As **Table 2** shows, the 10 percent frequency plumes for seasonal daylight hours are predicted to be very small with a length of 46 feet, a height of 121 feet, and a width of 20 feet. These plumes would in effect extend no higher than 31 feet above the tallest project structural component (combustion turbine stack)."

e. Table 2 on page 4.12-10 is hereby replaced with the following Table 2:

Table 2
10th Percentile Cooling Tower Visible Plume Dimensions

All Hours	**Cooling Tower**
Length (ft)	95
Height (ft)	128
Width (ft)	23
Seasonal* Daylight Hours	
Length (ft)	46
Height (ft)	121
Width (ft)	20
* Seasonal = November through April	

f. The reference to Birdsall 2001 in the first paragraph under "Combustion Turbine and Cooling Tower Exhaust Plumes" on page 4.12-14 is hereby changed to read Birdsall 2002.

g. The first sentence of the first paragraph under "Cumulative Visual Impacts Resulting from Visibility of Vapor Plumes" on page 4.12-17 is hereby changed to read as follows:

"The reasonable worst case plumes from the cooling towers (based on a 10 percent frequency of occurrence during seasonal daylight hours from November through April) would rise approximately 121 feet above ground level which would be approximately 31 feet above the HRSG stacks which are the tallest components of the proposed project."

~~2.~~1. The discussion of Without U.S. DataPort under the section entitled Compliance with Laws, Ordinances, Regulations, and Standards on page 4.12-18 is hereby revised to read as follows:

"Without US DataPort, the proposed project would be consistent with three policies and partially consistent with two policies. The project would be inconsistent with 15 policies. In all cases of inconsistency or partial consistency, either the inconsistencies would not initially produce a significant visual impact, or with timely and effective implementation of staff's conditions of certification, the impacts causing the inconsistencies would be mitigated to levels that would not be significant."

~~3.~~2. The consistency determination for Alviso Master Plan: Design Guidelines-Lands Outside of the Village Area, Development Standards-Parking, under the Without U.S. DataPort scenario in Table 3 on page 4.12-27, is hereby changed from "No" to "Yes."

~~4.~~3. The discussion of Without U.S. DataPort under Conclusions and Recommendations on page 4.12-31 is hereby changed to read as follows:

"Without US DataPort, the proposed project would be consistent with three policies and partially consistent with two policies. The project would be inconsistent with 15 policies. However, the visual impacts producing project inconsistencies with local LORS would be mitigated to less than significant levels with timely and effective implementation of staff's conditions of certification."

~~5.~~4. Response to Comment City-36 on page 4.12-30 is hereby revised to read as follows:

"No visible plumes are expected to occur from the combustion turbine exhausts. Visible cooling tower plumes would result in a low degree of viewer exposure, visual prominence, and view blockage when viewed by motorists and/or residents from locations in or beyond the immediate project vicinity due to their low frequency of occurrence, small size, and non-persistent presence. Because the resulting visual impact would be adverse but not significant, staff concluded that no special controls or practices would be necessary to further reduce the visibility of the cooling tower plumes."

~~6.~~5. The first paragraph of the Protocol for condition of certification **VIS-1** on page 4.12-32 is hereby replaced with the following paragraph:

"Protocol: If visible from nearby residences, SR-237, Zanker Road, or Grand Boulevard, the project site as well as staging and material and equipment storage areas shall be visually screened. All evidence of construction activities, including ground disturbance due to staging and storage areas, shall be removed and remediated upon completion of construction."

~~7.~~6. Condition of certification **VIS-2** on pages 4.12-32 through 34 has been revised to read as follows:

VIS-2 Prior to first turbine roll, the project owner shall a) treat all project structures and buildings visible to the public in appropriate colors or hues that minimize visual intrusion and contrast by blending with the surrounding landscape, and b) ensure that those structures and buildings have surfaces that do not create glare. A specific treatment plan shall be developed for CPM approval to ensure that the proposed colors do not unduly contrast with the surrounding landscape colors. The plan shall be submitted sufficiently early to ensure that any precolored buildings, structures, and linear facilities will have colors approved and included in bid specifications for such buildings or structures, unless the structures have been ordered prior to the Commission Decision. Prior to submittal of the plan to the CPM, the project owner shall submit the plan to the City of San Jose for review and comment.

Protocol: The treatment plan shall include:

a) specification, and 11" x 17" color simulations, of the treatment proposed for use on project structures, including structures treated during manufacture;

b) a list of each major project structure, building, and tank, specifying the color(s) proposed for each item;

c) samples of the proposed treatment and color on any fiberglass materials that would be visible to the public;

d) documentation that the surfaces to be used on all project elements visible to the public will not create glare;

e) a detailed schedule for completion of the treatment; and,

f) a procedure to ensure proper treatment maintenance for the life of the project.

After approval of the plan by the CPM, the project owner shall implement the plan according to the schedule and shall ensure that the treatment is properly maintained for the life of the project.

The project owner shall not perform the final treatment on any structures until the project owner receives notification of approval of the treatment plan from the CPM.

Verification: At least 60 days prior to construction of the project, the project owner shall submit its proposed plan to the CPM for review and approval and to the City of San Jose for review and comment.

If the CPM notifies the project owner that any revisions of the plan are needed before the CPM will approve the plan, within 30 days of receiving that notification, the project owner shall submit to the CPM a revised plan.

Not less than 30 days prior to the start of commercial operation, the project owner shall notify the CPM that all structures treated during manufacture and all structures treated in the field are ready for inspection.

The project owner shall provide a status report regarding treatment maintenance in the Annual Compliance Report."

~~8.~~7. Condition of certification **VIS-3** on page 4.12-34 has been revised to read as follows:

VIS-3 The project owner shall provide landscaping that is effective in screening the majority of structural forms (not the upper portions of the stacks) from the following key viewing areas: (a) SR-237 and the existing bicycle trail to the south, (b) Zanker Road to the west, and (c) the proposed Bay Trail alignments to the east (Reach 1) and north (Reach 2). Screening vegetation must be comprised of evergreen species and be provided on all four sides of the proposed project. Landscaping may be coordinated with the proposed PG&E Los Esteros Substation to take advantage of the proposed substation's landscaping. However, trees and other vegetation must be strategically placed and of sufficient height and density to achieve maximum effective screening of the proposed project structures as soon as possible. In screening project facilities, care must be taken in siting vegetation plantings to avoid blocking vista views of distant ridgelines (for an example, see simulation presented as **VISUAL RESOURCES Figure 7**).

Protocol: The project owner shall submit a landscaping plan consistent with the visual simulation provided as **VISUAL RESOURCES Figure 7** to the CPM for review and approval and the City of San Jose for review and comment. The Plan shall include:

a) 11"x17" color simulations of the proposed landscaping at 5 years as viewed from KOPs 1 and 2; and

b) a detailed list of plants to be used and times to maturity given their size and age at planting.

The project owner shall not implement the plan until the project owner receives approval of the submittal from the CPM. However, the planting must be completed by start of project operation.

Verification: Prior to first turbine roll and at least 60 days prior to installing the landscaping, the project owner shall submit the plan to the CPM for review and approval and the City of San Jose for review and comment.

If the CPM notifies the project owner that revisions of the submittal are needed before the CPM will approve the submittal, within thirty (30) days of receiving that notification, the project owner shall prepare and submit to the CPM a revised submittal.

The project owner shall notify the CPM within seven (7) days after completing installation of the landscaping, that the landscaping is ready for inspection."

~~9.~~8. Condition of certification **VIS-4** on pages 4.12-34 and 35 has been revised to read as follows:

VIS-4 Prior to first turbine roll, the project owner shall design and install all lighting such that light bulbs and reflectors are not visible from public viewing areas and illumination of the vicinity and the night sky is minimized during both project construction and operation. The project owner shall develop and submit lighting plans for construction and operation of the project to the CPM for review and approval and the City of San Jose for review and comment.

Protocol: The lighting plans shall require that:

a) All exterior night lighting shall be of minimum necessary brightness consistent with operational safety.

b) Lighting shall be designed so that during both construction and operation (consistent with worker safety), highly directional, exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the night sky is minimized. The design of this outdoor lighting shall be such that the luminescence or light source is shielded to prevent light trespass outside the project boundary.

c) High illumination areas not occupied on a continuous basis such as maintenance platforms shall be provided with switches or motion detectors to light the area only when occupied

d) A lighting complaint resolution form (following the general format of that in **Visual Resources Appendix VR-2**) shall be used by plant operations, to record all lighting complaints received and to document the resolution of those complaints. All records of lighting complaints shall be kept in the on-site compliance file.

Lighting shall not be installed before the plans are approved.

Verification: At least 60 days before ordering the exterior lighting, the project owner shall provide the lighting plans to the CPM for review and approval and the City of San Jose for review and comment.

If the CPM notifies the project owner that any revisions to the plans are needed before the CPM will approve the plans, within 30 days of receiving that notification the project owner shall submit to the CPM revised plans.

The project owner shall notify the CPM within seven days of completing exterior lighting installation that the lighting is ready for inspection."

RESPONSE TO AGENCY AND PUBLIC COMMENTS

COMMENTS FROM THE CITY OF SAN JOSE

SJ-45: Page 4.12-6, first sentence, "east" corrected to read "west" in describing KOP 2.

Response: The referenced sentence on page 4.12-6 is hereby revised to read as follows: "KOP 2 was established on Zanker Road approximately 0.38 mile west of the project site and approximately 0.4 mile north of SR-237 (see **VISUAL RESOURCES Figure 9**)."

SJ-46: Discussion of cooling tower plumes states that visible plumes would occur 16 percent of all daylight hours and 22 percent of al seasonal daylight hours. It would be difficult to describe this as a "low frequency of plume occurrence." In view of the conditions of certification required for the Metcalf Power Plant, a conclusion here that plumes would not have any visual impacts, when substantially greater than those at Metcalf, is not satisfactory. Given the high visibility of the project, the Staff Assessment needs to demonstrate that the Best Available technology is required and incorporated into the project to substantially reduce plume visibility.

Response: Based on a revised plume analysis using new data from the applicant, the predicted frequency of plume occurrence would be approximately 21 percent of seasonal daylight hours. Staff acknowledges that a 21 percent frequency of plume occurrence is not an insignificant frequency of occurrence. However, in this case the key issue is the visual character of the plumes and not the 21 percent frequency of occurrence. Due to the cooler exhaust temperatures, the cooling tower plumes would be limited to a transparent haze or whisps of moisture as opposed to the more typical billowing plume clouds that are apparent from other sources in the project region. As a result, plume visibility would be minimal in spite of a 21 percent frequency of occurrence and a highly visible site location.

SJ-47: On page 4.12-12, third paragraph, discussion hastily concludes that the project would not have a significant visual impact because SR 237 is not a state-designated route. SR 237 is designated as an Urban Throughway under the Scenic Routes and Trails diagram within the City's General Plan. Any negative impact to views from Urban Throughways could be considered significant.

Response: The referenced discussion on page 4.12-12 is specific to "state designated" scenic highways per section b of the environmental checklist. However, the impact discussion on "Power Plant and Linear Facilities Operation" on pages 4.12-12 and 13 does address the project's impacts on SR-237 and does conclude that the visual impact would be adverse and significant.

SJ-48: Overall, discussion of mitigation and conclusions related to Visual Resources is speculative and unsubstantiated. The project will include cooling towers of up to 90 feet in height with expected visual plumes up to 128 feet in height. As mitigation for any visual impacts, the SA recommends a landscaping plan, which will screen the project and reduce significant impacts (**VIS-3**). Figure 6 presents a view of the project with landscaping after 5 years. Given the low level of screening provided in this figure and the lack of specificity in **VIS-3**, the SA has not effectively demonstrated how identified significant visual impacts will be mitigated to a less than significant level.

Response: Condition of certification **VIS-3** specifically requires that "Trees and other vegetation must be strategically placed and of sufficient height and density to achieve maximum effective screening of the proposed project structures as soon as possible." The Protocol section of **VIS-3** further specifies that the landscaping plan must be "…consistent with the visual simulation provided as **VISUAL RESOURCES Figure 7**…" As shown in Figure 7, the landscaping would be effective in screening the majority of the project components while preserving the vista views across the site to the East Bay hills. Of particular importance is retention of sight lines to the more distant hills to the north as illustrated in the far left-hand portion of Figure 7. By achieving the visual screening illustrated in Figure 7, the project structural visual impacts would be mitigated to a level that would not be significant. The project's cooling tower plume during seasonal daylight hours would be approximately 121 feet in height (based on the revised plume modeling) or 31 feet above the 90-foot tall stacks. As stated above in response to comment SJ-46, the cooling tower plumes would be limited to a transparent haze or whisps of moisture as opposed to the more typical billowing plume clouds that are apparent from other sources in the project region. As a result, plume visibility would be minimal and would not require mitigation in the form of additional screening.

SJ-49: Condition of certification **VIS-3** states that landscaping shall be provided surrounding the project. The landscaping plan included in Figure 16 only includes landscaping for the southern and western borders of the project.

Response: Although Figure 16 only shows landscaping on two sides, staff has concluded that the project would need to be screened on all four sides in order to mitigate significant visual impacts to the proposed Bay Trail alignments along the east and north sides of the project site. However, the precise location for landscaping has yet to be determined. PG&E's proposed substation is also to include landscaping which may reduce the amount of landscaping required for the proposed project. In order to acknowledge the proposed presence of the substation and its attendant landscaping, the first paragraph of Condition **VIS-3** on page 4.12-34 has been revised to read as

follows to allow the Applicant the flexibility to coordinate their landscaping plan with the proposed PG&E project:

"The project owner shall provide landscaping that is effective in screening the majority of structural forms (not the upper portions of the stacks) from the following key viewing areas: (a) SR-237 and the existing bicycle trail to the south, (b) Zanker Road to the west, and (c) the proposed Bay Trail alignments to the east (Reach 1) and north (Reach 2). Screening vegetation must be comprised of evergreen species and be provided on all four sides of the proposed project. Landscaping may be coordinated with the adjacent PG&E Los Esteros Substation to take advantage of the proposed substation's landscaping. However, trees and other vegetation must be strategically placed and of sufficient height and density to achieve maximum effective screening of the proposed project structures as soon as possible. In screening project facilities, care must be taken in siting vegetation plantings to avoid blocking vista views of distant ridgelines (for an example, see simulation presented as **VISUAL RESOURCES Figure 7**)."

SJ-50: Many of the policies from the Alviso Master Plan evaluated for consistency analysis should be discussed within the Land Use section of the SA rather than here.

Response: It is acknowledged that some of the policies included in the Visual Resources LORS analysis have greater pertinence to the Land Use analysis. However, they are included in the Visual Resources section because at least some aspect of the policy is of visual relevance.

COMMENTS FROM PACIFIC GAS AND ELECTRIC COMPANY

PG&E-2: On page 4.12-13 of the Visual Resources section, the fourth sentence of the first full paragraph states, "also, landscaping would need to be extended along the north side of the project site." PG&E Co. believes that this mitigation measure is unnecessary because PG&E plans to install landscaping along the north side of its substation. The substation would be north of, and between, the planned bay trail south of the Water Pollution Control Plant sludge drying beds and the LECEF. We recommend that this mitigation measure be deleted.

Response: Please see Response to Comment SJ-49 above.

PG&E-3: The Staff Assessment as a whole must address the potential environmental impacts caused by the temporary transmission line connecting the plant with the Trimble-Nortech 115 kV transmission line located at Zanker Road and State Route 237. PG&E Co. cannot construct transmission facilities over 50 kV unless authorized under the CPUC's General Order 131-D. Unless otherwise exempt under GO 131-D, 115 kV transmission lines require a "Permit to Construct" from the CPUC. However, 115 kV lines that have already undergone environmental review by another agency as part of a larger project are exempt from the CPUC's Permit to Construct process.

Thus, if the CEC's environmental analysis ultimately concludes that the temporary transmission line would have no significant unavoidable environmental impacts, and if that finding is included in a final Staff Assessment certified by the full Commission, PG&E Co. can then file for an exemption from the CPUC's Permit to Construct process. If, on the other hand, the Staff Assessment fails to analyze the temporary transmission line and make the required findings, PG&E will have to obtain a Permit to Construct, and undergo a separate environmental review taking as long as 18 months, before it may construct the temporary line.

Response: The analysis of the 115 kV transmission line presented as the first full paragraph on page 4.12-9 and the first full paragraph on page 4.12-14 is hereby revised to read as follows:

"Although the temporary 115 kV transmission interconnection would be visible in views from SR-237, Zanker Road, and Reach 2 of the proposed Bay Trail (to the north of the project site), it would be seen in the context of other existing transmission lines and utility poles along Zanker Road and on the north side of SR-237. The resulting visual contrast would be low-to-moderate and the proposed structures would appear subordinate to co-dominant depending on the viewer's location. View blockage would be low-to-moderate, as would be the overall degree of visual change associated with the transmission line. While the resulting visual impact would be adverse, it would not be significant, particularly in light of the temporary nature of the impact."

COMMENTS FROM THE CITY OF MILPITAS

MIL-3: Under the City of San Jose General Plan, *Scenic Routes and Trails Diagram*, the policies state that new development adjacent to trails and pathways corridors, such as the trails along both side of Coyote Creek, should not compromise safe trail access nor detract from the scenic and aesthetic qualities of the corridor. (See **Land Use Table 1**.) This policy is not adequately analyzed. The LECEF project, by detracting from the natural riparian experience along Coyote Creek, seems in opposition to this policy.

Response: On the east side of Coyote Creek, adjacent to the McCarthy Ranch development, the existing informal trail along the east levee will serve as the alignment for both the Bay Trail and Juan Bautista de Anza National Historic Trail, trails that are of local, regional, statewide, and national importance. The City of Milpitas has received a grant from the Association of Bay Area Governments to proceed with the design phase of the new trail project and construction is scheduled to begin in the fall of 2002.

The proposed project would have minimal visual impact on the trail alignment located on the east side of Coyote Creek. Traveling northbound on the trail in the vicinity of SR-237 and Ranch Road, views are generally drawn to the north along the trail and riparian corridor and to the northeast toward the East Bay Hills. In general, the most prominent feature in this landscape is the McCarthy

Ranch commercial development, and specifically, the Veritas campus (under construction). Along this stretch of the trail, the riparian vegetation is high enough and dense enough to substantially screen views to the west toward the proposed project. Between Ranch Road and the Veritas campus, there is a gap in the riparian vegetation, which allows for unobstructed views to the west toward the proposed project. At this point, the power plant would appear as a prominent feature in the landscape. However, at this location, the view direction toward the proposed project would be approximately 90^{o} off of the primary northbound view direction, with the primary cone of vision generally spanning from the northwest to northeast. Furthermore, a pedestrian would pass this point of visual access relatively quickly. North of this location, the proposed project would pass to the rear of the viewer and the Veritas campus would continue to dominate northbound views given its close proximity to the trail (the buildings are located approximately 300 feet from the trail and the parking lot is located approximately 30 feet from the trail).

Traveling south on this segment of the Bay Trail (eastside of Coyote Creek), views toward the proposed project would again be substantially screened by the riparian vegetation. North of the gap in the riparian vegetation, the Veritas campus and parking lot would be the dominant features in the landscape. At the riparian gap, views of the project would be available though pedestrians would pass this narrow point of visual access relatively quickly. South of the riparian gap, vegetation along Coyote Creek would substantially screen the proposed project from the trail. The resulting visual impact on the east side segment of the Bay Trail would be adverse but not significant due to the relatively brief duration of visual access to the project.

Traveling north on Reach 1 of the proposed Bay Trail along the west side of Coyote Creek and just north of SR-237, views are generally drawn to the riparian vegetation adjacent to the trail and the open landscape directly to the north along the trail. Slightly further to the north, the trail begins to curve to the northwest. At this point, the proposed project would be located almost due west. The power plant would appear as a prominent feature in the landscape but would not obstruct primary directional views spanning northwest to northeast and would not significantly impact on vista views available from this portion of the Bay Trail. Just north of this viewpoint, the power plant would pass to the rear of viewers as they continue north on the trail. The duration of time that the power plant would be conspicuous in the landscape would be relatively brief and the resulting visual impact would be adverse but not significant.

Traveling south on Reach 1 along the west side of Coyote Creek from north of the project site, the power plant would be central to the view from the trail and would appear as the dominant landscape feature with highly contrasting industrial character. The power plant would also partially block views of the Peninsula hills extending to the south, substantially impacting vista views from this perspective. The resulting visual impact would adverse and significant. Strategically placed landscaping, as required in Condition of certification **VIS-3**, would screen the majority of the lower elements of the power plant from trail

views and the impact would be reduced to a level that would not be significant. Furthermore, if landscaping associated with PG&E's proposed Los Esteros Substation is installed along the north and east sides of the substation, (which would be in closer proximity to trail viewers), views of the power plant from the trail could potentially be even more effectively screened depending on the height and density of the landscape screen. By the time trail viewers reached a point directly across from the northern boundary of the project site, the trail would have curved to the southeast, and views would be drawn away from the project site to the east and southeast.

Traveling west on Reach 2 of the Bay Trail, which would be located north of the proposed project and proposed substation, views are drawn to the Peninsula hills to the west. The view to the north would be constrained by the row of trees that extends along the southern boundary of the Santa Clara Water Pollution Control property. Although the proposed power plant would be visible to the south, it would not be within the primary cone of vision, which would generally span west to southwest. Therefore, the proposed project would not significantly impact on vista views from this portion of the Bay Trail. Also, the view toward the proposed project would be substantially screened by the substation project and associated landscaping. The resulting visual impact would be adverse but not significant.

Traveling east on Reach 2 of the Bay Trail, views are generally, drawn to the east and southeast toward the East Bay hills. Again, the view to the north would be constrained by the row of trees that extends along the southern boundary of the Santa Clara Water Pollution Control property. Although the proposed power plant would be visible to the south as a prominent feature in the landscape, it would not be within the primary cone of vision, which would generally span east to southeast. Also, the view toward the proposed project would be substantially screened by the substation project and associated landscaping. As a result, the proposed project would not substantially impact vista views from this viewing perspective and the resulting visual impact would be adverse but not significant.

MIL-4: The discussion at page 4.5-11 should note that the trail alignment along the east side of Coyote Creek (in Milpitas) serves as both the Bay Trail and Juan Bautista de Anza National Historic Trail. Furthermore, the discussion incorrectly notes that the Bay Trail project is not yet funded. The City of Milpitas has prepared an alignment for the segment of the Bay Trail along the eastern side of Coyote Creek, received a grant from the Association of Bay Area Governments, and is currently proceeding with the design phase of the project. Construction is scheduled to begin in the fall of 2002. Obviously, this trail segment is of local, regional, statewide, and national importance, and the SA should thoroughly analyze the impacts of the LECEF on the trail.

Response: Please see Response to Comment MIL-3.

MIL-5: Community Character Policy 2 states that new developments should have architectural and landscaping qualities that maintain the "seaside" qualities of

Alviso. The power plant will not have architectural elements that will have "seaside" qualities. It will look like an industrial and utilitarian facility. The Addendum should include an analysis of this policy.

Response: The proposed project's inconsistency with this policy guidance is discussed under the Alviso Master Plan Design Guidelines – Lands Outside of the Village Area in the Visual Resources LORS analysis Table 3 (page 4.12-25). Please see the Land Use Supplement **MIL-5** answer for additional discussion.

MIL-6: In relation to Lands Outside of the Village Area Design Objective, the high-visibility project will not be attractive and is questionable whether it will fit in the context of the larger community.

Response: The proposed project's inconsistency with this design objective is discussed under the Alviso Master Plan Design Guidelines – Lands Outside of the Village Area in the Visual Resources LORS analysis Table 3 (page 4.12-25).

MIL-7: Light Industrial areas in the Alviso Master Plan allow a wide variety of industrial uses *EXCEPT or EXCLUDING* any uses with unmitigated hazardous or nuisance effects. It is not clear that the project will not have any unmitigated nuisance effects (visual, biological).

Response: As described in this Addendum and in Section 4.12 (Visual Resources) of the Staff Assessment, with timely and effective implementation of staff's proposed conditions of certification, the proposed project would cause less than significant visual impacts. Any residual (following mitigation) visual impacts would not be considered nuisance effects.

MIL-12: In performing the environmental review for this project, the Staff Assessment should not consider the potential mitigating impacts of the presence of the U.S. DataPort. As presented to the Commission, Calpine's application has absolutely nothing to do with the U.S. DataPort project. Nothing in the application requires the U.S. DataPort to be built; Calpine does not control the U.S. DataPort property and cannot guarantee that it will ever be completed. Once Calpine receives a license for the facility from the CEC, it will be free to construct the LECEF, whether or not the U.S. DataPort (or some other data center) ever gets built on the site, and Calpine has not offered to make its approval conditional on the completion of the U.S. DataPort project. Furthermore, while the LECEF, with a CEC approval, could be built without the U.S. DataPort, the corollary is not true: because of the City of San Jose's conditions of approval, the U.S. DataPort project could not be constructed without the approval of the LECEF or something similar. Therefore, for environmental review purposes, the CEC must analyze the LECEF as a separate and distinct project from the U.S. DataPort project. To do otherwise would be inconsistent with CEQA's mandate to evaluate the impacts of the project based on the environmental baseline.

Response: The Visual Resources section of the Staff Assessment includes two complete analyses of two different development scenarios: With US DataPort and Without US DataPort. Under the Without US DataPort scenario, the proposed project is analyzed as a separate and distinct project from the US DataPort project.

MIL-14: The Key Observation Points evaluated by staff are insufficient. According to the Analysis Methodology (Appendix VR – 2), "KOPs are selected to be representative of the most critical locations from which the project would be seen." Staff analyzed three KOPs of varying degrees of impacts. Milpitas would agree that KOP 1, the view from 237, is a critical location from which the project would be viewed. However, Milpitas believes that KOPs 2 and 3 are not representative of the most critical locations from which the project would be seen. KOP 2, the view from Zanker Road, which is to the west of the project site, is not a critical viewshed because of the lack of viewers and the "moderate visual quality" of the views. KOP 3, the view from the nearest Alviso residences, which are approximately 1.7 miles away, is too far away from the site to be impacted.

Response: Staff believes that the Key Observation Points selected are appropriate for the visual resources evaluation of the proposed project and are representative of the most critical public viewing opportunities. However, staff has recently received additional information on the proposed Bay Trail in the project vicinity. A discussion of the potential visual impacts to the Bay Trail along the east and north sides of the project site is presented in Response to Comment **MIL-3**.

MIL-15: Of greater concern should be those well traveled (and soon-to-be well traveled) locations from which the project would be seen to the east (in the City of Milpitas). A casual glance at **Visual Resources Figure 1** discloses that viewsheds on the eastern side of the project—the location of the nearest land developed with sensitive uses—has been completely ignored. To remedy this deficiency, Milpitas recommends that the following KOPs be added to the analysis as part of the Addendum to the SA. As we describe below, the visual impacts disclosed from these locations are likely to be significant, and therefore they are among the "most critical locations from which the project would be seen."

Response: With the exception of the Veritas Development office building located between McCarthy Ranch Boulevard and Coyote Creek, views of the proposed project from the developed areas east of the project site are either screened by vegetation or other structures or limited by distance or view orientation. For these reasons, additional Key Observation Points east of Coyote Creek are not recommended.

MIL-16: It is unclear why the view from westbound SR 237 was not included in the KOPs. The Addendum should analyze it as a potential KOP. The view over the site is fairly expansive, given the lack of structures in the foreground.

Response: Views of the proposed project site from westbound SR-237 are not available until just west of the McCarthy Boulevard westbound on-ramp to SR-237. At that point, the project site is situated well beyond the primary cone of vision (45^{o} either side of the direction of travel) to the north. As a result, the project would be visible for only a few seconds before the viewer would pass to the west of the site. In contrast, the eastbound view from SR-237 would contain the proposed project within the primary cone of vision and the project would be visible for a greater duration than for westbound viewers. For those reasons, staff considers KOP 1 to be adequately representative of the most impacted views along SR-237.

MIL-17: At various places, the Staff Assessment notes that the LECEF would have substantial impact on the views from the Bay Trail, which runs along the eastern side of the Coyote Creek corridor approximately 750 feet to the west of the project site. (See, for example, SA, p. 4.12-4 [noting that the project would be "prominently visible in foreground views" from the Bay Trail].) The impact is considered in a narrative fashion, but visual simulations and a full analysis of the impacts of the LECEF on the Bay Trail are not included.

Response: The discussion on page 4.12-4 refers to Reach 1 of the Bay Trail on the west side of Coyote Creek and not the east side of Coyote Creek. Please also see Response to Comment **MIL-3**.

MIL-18: This Bay Trial segment is clearly among the most critical locations from which the project would be seen, and a KOP for the Bay Trail must be included in the Addendum to the SA. It is recognized as an important public facility not just at the local level but also at the state and federal level. (See discussion at pages 4.5-11–4.5-12 of the SA [noting that the trail segment is part of the state mandated Bay Trial and the Juan Bautista De Anza National Historic Trail.) In addition, Milpitas is currently beginning the design and construction process for the trail and expects it to begin construction in the fall of 2002. In addition, under San Jose's planning documents, the proposed Bay Trial is a "scenic vista" that needs to be carefully analyzed. (See U.S. DataPort Draft EIR, p. 163, 170.) Despite the importance of this facility, and its status as a scenic vista, not one of the KOPs for this project includes the view from the proposed Bay Trail. Indeed, the Staff Assessment, without adequate explanation, concedes that the staff rejected the City of San Jose's direct invitation to include such a KOP. (See SA, p. 4.12-30.) It is unclear why staff has chosen to ignore this clearly important public facility.

Response: The proposed project would be minimally visible to users of the Bay Trail on the east side of Coyote Creek and would not cause significant visual impacts. For this reason, staff has not established a key observation point along that portion of the Bay Trail. However, based on comments received from the City of Milpitas, the project's potential impact on the east side Bay Trail has been described in Response to Comment MIL-3.

MIL-19: The Staff Assessment notes that, even with the construction of the U.S. DataPort project, the upper portion of LECEF facilities would be visible to the upper floors of some of the office buildings in the McCarthy Ranch development along the east side of Coyote Creek. (SA, p. 4.12-4.) We presume this reference is to the Veritas campus buildings currently under construction in Milpitas along the Coyote Creek corridor. CEC staff has previously noted that viewer sensitivity is high for people working in a high quality work environment (Metcalf Final Staff Report, p. 303.) Accordingly, the view from the upper floors of the Veritas campus is among the most critical locations from which the project would be seen, and the Addendum to the SA should include it as a KOP.

Response: Staff responsible for preparing the LECEF Visual Resources Staff Assessment does not generally consider occupants of a commercial or office park complex to have high viewer sensitivity unless the views from the property are integral to the activities of the commercial endeavor. Therefore, the Veritas campus is not considered to be one of the more critical locations from which the project would be seen nor is it considered appropriate for establishment of a Key Observation Point.

MIL-20: It is not clear whether the LECEF would be viewable from the McCarthy Ranch Boulevard/SR 237 overcrossing. Since the overcrossing is raised, it is likely that the existing vistas from the overcrossing over the project site could potentially be impacted by the LECEF. The Addendum should analyze the impact of the LECEF on the view from the overcrossing and determine whether an additional KOP is appropriate.

Response: The northbound view of the proposed project from the McCarthy Ranch Boulevard/SR-237 overcrossing is partially obscured by the fence along the overpass and substantially screened by the riparian trees along Coyote Creek. Furthermore, the overcrossing and associated intersections are quite complex, requiring a motorist's full visual attention to road and traffic conditions. For these reasons, this location is not considered appropriate for the establishment of a Key Observation Point since the proposed project would not typically capture the viewer's attention.

MIL-21: An approximately ten-story hotel—the Crowne Plaza—is within approximately one half mile of the LECEF project site and within the City of Milpitas. It is likely that the LECEF would be viewable from the upper floors of the Crowne Plaza, and it is likely that viewer sensitivity from the rooms—much like residences—would be high. Accordingly, the Addendum should analyze the impact of the LECEF on the view from the hotel and determine whether an additional KOP is appropriate.

Response: The Crowne Plaza hotel was not selected for establishment of a KOP for the following reasons: (a) views from the north side of the hotel are dominated by the Hampton Inn hotel and the McCarthy Ranch development, (b) the proposed project site, while visible from the north side of the hotel, is located to the west beyond the primary cone of vision from the hotel rooms, (c)

the proposed project would appear subordinate to the dominant commercial buildings located in front of the hotel to the north, (d) hotel occupants represent a transient viewing population that would generally not be occupying the hotel based on the available view, and (e) guests at the hotel would typically be occupied with other activities during daylight viewing opportunities and would not likely be spending a significant amount of their stay viewing out the windows during the day.

MIL-22 & 23: In its pending petition to remove the LECEF project from the four-month process, Milpitas pointed out that the City of San Jose already found that the visual impacts of the U.S. DataPort project would be significant and unavoidable because of the impacts on the scenic vistas from SR 237 and the Bay Trail. The Staff Assessment completely ignores the comments made by Milpitas in its petition for removal. The entirety of the staff analysis concerning whether the LECEF would have a substantial adverse impact on a scenic vista follows:

The openness of the site's level, undeveloped terrain allows for panoramic vista views to the east and north across the site to Mission Peak and the East Bay Hills. The opportunity for such distant sightlines to the north-trending ridgeline of the East Bay Hills is becoming increasingly rare along the fast developing SR-237 corridor. The proposed project structures would partially impair though not completely block these vista views. However, screening vegetation necessary to minimize degradation of existing visual quality could inadvertently block vista views to the ridgeline of the East Bay Hills. This could occur if screening vegetation is planted too close to SR-237 as is shown in the simulation presented as **VISUAL RESOURCES Figure 4.** Vegetation planted in close proximity to SR-237 screens the more northerly ridgeline as illustrated on the left side of **Figure** 4. The result is that the panoramic vista view is substantially constrained, causing an adverse and significant impact under this criterion. Staff's proposed Condition of Certification **VIS-3** would preserve these more distant sightlines while still screening the majority of the proposed project features, thereby ensuring that a significant visual impact does not result from blockage of scenic vistas. The project's cooling tower vapor plumes would be visible from nearby roadways and residences. However, due to the relatively low frequency of plume occurrence, small plume size, and non-persistent nature of these plumes, the resulting visual impact on vista views would be less than significant.

This analysis must be substantially revised. The significance criterion requires a two-part inquiry. First, one asks whether the project is viewable from a scenic vista. In this case, the City of San Jose concluded that two scenic vistas existed—State Route 237 and the Bay Trail. (See U.S. DataPort Draft EIR, pp. 163, 170.) The Staff Assessment apparently acknowledges only that SR 237 is a "scenic vista." There is no doubt that the Bay Trail, for the reasons noted above, is a "scenic vista" of utmost importance. The analysis should be revised to analyze the impact of the project on the Bay Trail.

Response: Staff has elaborated on the proposed project's potential impacts to segments of the Bay Trail including impacts on vista views in Response to Comment MIL-3.

MIL-24: The second inquiry is whether the project would have a substantial adverse impact on that scenic vista. The Staff Assessment did not perform this inquiry for the Bay Trail. With respect to the SR 237 vista, the SA concludes that the project would substantially affect the view of Mission Peak from SR 237; however, it concludes that appropriately placed landscaping would reduce this impact to a level of insignificance. The SA does not explain how simply screening the buildings will reduce this impact to a level of insignificance. While these measures could potentially soften the impact of the introduction of a power plant into the view of Mission Peak from SR 237, Milpitas does not believe that this impact can be reduced to a level of insignificance. Review of the photo simulations discloses that the addition of the power plant, even with landscaped screening, would be a major change to the vista from SR 237. (Compare SA, VR-Figure 2 with VR-Figures 4 and 5.) We believe this blockage is substantial notwithstanding that it would be only partial. The SA needs to explain why staff believes this change in the view is not a substantial impact so that the public can evaluate the conclusion. The visual simulations should be updated to reflect the "result" of staff's proposed screening mitigation measure. Furthermore, although the U.S. DataPort project included a landscaped berm around the site and various other mitigations to minimize the visual impacts of the project, in the environmental review for the U.S. DataPort project, the City of San Jose still concluded that the impact on the scenic vista from SR 237 would be a significant unavoidable impact. The SA does not explain why its conclusion is to the contrary.

Response: The appropriate comparison is between Figure 2 (existing conditions) and Figure 7 (the proposed project with mature screening vegetation). As noted in the Visual Analysis presented in the Staff Assessment, visual quality of the site is moderate and reflects the influence of the dilapidated green houses, existing utility poles, the SR-237 infrastructure, and other existing structures on and near the site as well as open agricultural fields. However, more important than the site's visual quality is the panoramic vista view over the site to the East Bay hills in general and the more distant northerly hills visible in the left portion of Figure 2. These unimpeded panoramic sightlines are integral to the site's open character. As shown in Figure 7, the proposed landscaping would block a portion of the lower slopes of the East Bay hills, but much of that area is already blocked from view by existing structures and vegetation. The vegetative screening would substantially screen the power plant from view but would not interrupt sightlines to the distant ridgelines. As a result, the panoramic vista views would remain substantially intact.

MIL-25: The Addendum should include an analysis of the impact on the scenic vista from the Bay Trail.

Response: Please see Response to Comment MIL-3.

MIL-26: The Addendum should include an explanation of how the mitigation measures will reduce the visual impacts of the LECEF on the scenic vistas from SR 237 and the Bay Trail to a level of insignificance, if indeed they can.

Response: Please see Responses to Comments SJ-48 and MIL-3.

MIL-27: The Addendum should include an explanation of why the staff's significance finding deviates from the finding of the City of San Jose in the U.S. DataPort EIR and CEQA findings.

Response: The Staff Assessment describes the basis for the conclusions reached with regard to Visual Resources. Staff is not in position to evaluate the basis of the City's findings with regard to U.S. DataPort, which is a different project than the proposed project.

MIL-28: Staff's methodology and criteria are difficult to follow. For instance, the "Analysis Methodology" states that view quality ranges from outstanding to low. It fails, however, to describe the ranges in between outstanding and low, and how they relate to CEQA's significance criteria. The Addendum needs to explain the criteria used to evaluate visual impacts in greater detail so that the conclusions reached can be evaluated by the public.

Response: Visual Quality as discussed in the Staff Assessment can range from outstanding to low and can typically include intermediate classifications of high, moderate-to-high, moderate, and low-to-moderate. Visual quality as considered in the referenced Staff Assessment Analysis Methodology is one contributing factor in the overall assessment of visual sensitivity. Project-induced visual change is considered within the context of the overall visual sensitivity of the existing landscape and viewing circumstances in order to arrive at a preliminary determination of impact significance.

MIL-29: The SA notes that the existing setting results in a moderate to high visual sensitivity reflecting the moderate visual quality of the view of Mission Peak, moderate viewer concern, and high viewer exposure. First, it is hard to understand how a "foreground to middle ground *panoramic* view of an *open rural* landscape" (albeit bordered by transportation infrastructure) with a backdrop of Mission Peak and the East Bay hills (see SA, appendix VR-1, p. 4.12-37) is graded "moderate" for visual quality. KOP 1 compares favorably to other views described as of *moderately high* visual quality in the Metcalf proceeding (see Final Staff Assessment, Metcalf Energy Center, Visual Resources, Figures 8, 9). The SA needs to explain in more detail how it reached this conclusion.

Response: As described in the analysis and illustrated in **VISUAL RESOURCES Figure 2**, the visual quality experienced at KOP 1 is substantially influenced by the dominance of the transportation and utility infrastructure along SR-237.

MIL-30: The analysis next concludes that "the overall visual change that would be experienced at KOP 1 would be moderate." This conclusion is so despite that the visual contrast is "moderate to *high*" the project is co-dominant (which we presume means the project and view of Mission Peak are similarly dominant), and the view blockage is moderate. The nature of this conclusion needs to be explained in more detail so that it can be evaluated.

Response: The conclusion that overall visual change would be moderate is a result of two of the three contributing factors (project dominance and view blockage) having moderate ratings (co-dominant is equivalent to a moderate rating for project dominance between subordinate and dominant) and the third factor (visual contrast) being intermediate between moderate and high.

MIL-31: Despite finding that the overall visual change is moderate, the analysis concludes that the resulting visual impact on SR 237 and the bay trail "would be adverse *and significant*." (SA, p. 4.12-13.) However, the SA again concludes that this impact can be reduced to a level of insignificance—through landscaped screening—despite San Jose's findings in its environmental review of the U.S. DataPort EIR. For the same reasons described in the previous subsection, this conclusion is unsound. In addition, it is further undermined by the weakness of the findings described in this subsection.

Response: As discussed in the analysis on pages 4.12-12 and 13, the resulting visual impact would be significant when considering the adverse visual change in the context of the moderate-to-high visual sensitivity of the existing landscape and viewing circumstances. Staff believes that this conclusion is supported by the simulation presented as **VISUAL RESOURCES Figure 6**. Staff has also concluded that timely and effective implementation of landscape screening as illustrated in **VISUAL RESOURCES Figure 7** would reduce the visual impact (without U.S. DataPort) to a level that would not be significant. Furthermore, the City's findings pertaining to their U.S. DataPort visual analysis are not directly applicable to this present analysis which addresses a completely different project.

MIL-32: Finally, the analysis of whether the project would substantially degrade the existing visual character or quality of the site and its surroundings should not be limited to the view from SR 237 of Mission Peak and the East Bay hills. While the impacts on the Bay Trail and the existing bike trail are mentioned (see SA p. 4.12-13), the full visual impact analysis is limited to the impact on the view from SR 237 and the other KOPs. (See Appendix VR – 1, p. 4.12-36.) The analysis should do a full evaluation of the impact on at least the KOPs suggested above.

Response: Please see Response to Comment MIL-3.

MIL-33: The SA concludes that "[g]iven the lack of existing lighting at the project site, the proposed lighting has the potential to change the character of the existing landscape at night..." (SA, p. 4.12-15.) Milpitas believes that the project would change the character of the landscape. However, the SA concludes that the

impacts are less than significant with mitigation. Since minimizing direct lighting and illumination of the night sky (see condition **VIS-4**) will not necessarily be sufficient to mitigate the impacts of the light created by the project, the Addendum should explain how this conclusion is reached. The Addendum should also describe in additional detail the nature of the night lighting that would be required for operational safety and security.

Response: Visual Resources condition of certification **VIS-4** regarding night lighting is comprehensive in its requirements, protocols for meeting the condition, and verification procedures for insuring compliance with the condition. Although the specifics of the proposed project's lighting plan have not yet been provided to staff for review, effective implementation of Condition VIS-4 would adequately mitigate potential night lighting impacts.

MIL-34: The City is concerned that the plumes from the power plant will be viewable from a significant area of Milpitas. The SA does not specify the distances from which the plumes would be viewable.

Response: As discussed above in Errata Item No. 2, the 10 percent frequency cooling tower plume would extend approximately 121 feet above the ground or approximately 31 feet above the tallest project structures. Also, due to the cooler exhaust temperatures, the cooling tower plumes would be limited to a transparent haze or whisps of moisture as opposed to the more typical billowing plume clouds that are apparent from other sources in the project region. As a result, plume visibility would be minimal in the project region.

MIL-35: The staff assessment notes that the image presented in Figure 4 is "substantially smaller than life-size scale." Please explain this comment. Does the figure not accurately reflect the alterations to views that would take place if the LECEF were constructed? Does Figure 3 have the same problem? They appear substantially identical in scale.

Response: The previous version of Figure 4 was replaced just prior to production of the Staff Assessment with an appropriately scaled image. Therefore the referenced note at the top of page 4.12-4 is hereby deleted.

MIL-36: The section on viewer exposure without the U.S. DataPort fails to mention that the site would be viewable from the upper floors of the office buildings in McCarthy Ranch (SA, p. 4.12-4).

Response: The first paragraph under "Site Visibility Without U.S. DataPort is hereby revised to read as follows:

"Without the presence of the US DataPort buildings and landscaping, the proposed project would be prominently visible in foreground views from SR-237, Zanker Road, the bicycle trail along the north side of SR-237, the proposed Bay Trail, and the upper floors of the Veritas campus on the east side of Coyote Creek. The project would also be visible as a distant middleground feature (though not prominently so) from the Alviso residential neighborhood along Grand Boulevard."

MIL-37: The staff assessment consistently uses the phrase “adverse but not significant” to describe the impacts. (See SA, pp. 4.12-8–4.12-10, 4.12-13–4.12-14.) This is unusual and confusing terminology. How does the staff distinguish effects that are adverse from those that are significant? Our review of the “analysis methodology” did not disclose any criteria that used the terminology staff uses. It would be helpful if the Staff Assessment used terminology used in CEQA criterion it is analyzing.

Response: The phrase “adverse but not significant” is commonly used terminology in CEQA analyses. An adverse but not significant impact is perceived as negative but does not exceed environmental thresholds as described under “Significance Criteria on pages 4.12-39 and 40. In the present methodology, impact significance is ultimately arrived at by considering the project-induced visual change within the context of the overall visual sensitivity of the existing landscape and viewing circumstances and evaluating the result against the significance criteria presented in the methodology section (pages 4.12-39 and 40).

VISIBLE PLUME ANALYSIS

Supplemental Testimony of Brewster Birdsall

Page 4.12-2 – LORS, LOCAL

Insert the following text:

> In addition to the plans, policies, and guidelines identified in the Applicant's Application, the conditions of the City's final action on the U.S. Dataport EIR included (SA, p. 3-1): "Use of best commercially feasible available technology for plume visibility reduction."

Page 4.12-30 – Response to Agency and Public Comments

Add response to **CITY-36**:

> No visible plumes are expected to occur from the combustion turbine exhausts, and only limited plumes are expected from the cooling towers. Because the presently proposed chillers serve a relatively low heat rejection load, commercially-feasible plume abatement technologies (including dry-chilling or air cooling for the auxiliary and gas compressor loads) may not be cost-effective given the visual character and size of the cooling tower plume. Staff anticipates that implementing plume abatement technology would be more cost-effective in the future, because more intense cooling tower plumes would be anticipated with the combined-cycle system (as required, see SA, p. 5.3-1). After assessing the limited visual effects caused by the proposed system, staff concluded that no special controls or practices would be necessary to reduce the visibility of the plumes. However, because the applicant must demonstrate to the satisfaction of the City of San Jose that the proposed system demonstrates the "best commercially-feasible available technology," Condition of Certification **VIS-6** is added below.

Page 4.12-35 – Proposed Conditions of Certification

Add new **VIS-6**:

VIS-6 The project owner shall implement the "best commercially-feasible available technology" for cooling-related plume abatement. The project owner shall not construct the cooling system until the project owner receives notification of approval from the CPM that the proposed system incorporates the "best commercially-feasible available technology" for plume abatement.

Verification: At least 60 days prior to construction of the power plant, the project owner shall submit to the CPM for review and approval and to the City of San Jose for review and comment an analysis that reviews commercially-feasible and available plume abatement technologies for the cooling system (including dry-chilling) and presents their effectiveness and costs compared to the proposed system, which consists of a two-cell wet counter flow cooling tower.

WASTE MANAGEMENT

Supplemental Testimony of Alvin J. Greenberg, Ph.D.

Page 4.13-7 – 4th line in the paragraph under d)

Delete: "11"
Insert: "23"

PROPOSED CONDITIONS OF CERTIFICATION

Waste-2- first line of paragraph 1

Delete: "pre construction,"

Verification: Revise the fist sentence to say: " 30 days prior to the start of construction, or a lesser time as mutually agreed to, the project owner shall…"

Waste-3- verification: Revise the fist sentence to say: "30 days prior to the start of site mobilization, or a lesser time as mutually agreed to, the project owner shall…"

Waste-4- verification: first line after "any" and before "reports".

Insert: "final"

WORKER SAFETY/FIRE PROTECTION

Supplemental Testimony of Alvin Greenberg, Ph.D.

Page 4.14-10, under the heading **FIRE PROTECTION** (at the end of the 3rd paragraph)

Insert: The FPPP shall:

- Address the requirements delineated in Articles 9 and 87 of the San Jose Fire Code.
- Identify the different automatic fire suppression systems that will be installed in the buildings and structures within the power plant site.
- Describe the fire alarm systems and emergency alarm system that will be provided.

Page 4.14-12, before the heading **CONCLUSIONS**

Insert the following headings and comment:

RESPONSE TO AGENCY AND PUBLIC COMMENTS

AGENCY COMMENTS

The San Jose Fire Department

SJFD-4 The SJFD requested that the following requirements be added to the CFPPP mentioned in page 4.14-9.

The applicant shall:

- Address the requirements delineated in Articles 9 and 87 of the San Jose Fire Code.
- Identify the different automatic fire suppression systems that will be installed in the buildings and structures within the power plant site.
- Describe the fire alarm systems and emergency alarm system that will be provided.

Response: Staff agrees with the requirements and they were added to the analysis on page 4.14-10.

FACILITY DESIGN

Supplemental Testimony of Shahab Khoshmashrab, Al McCuen and Steve Baker

The verification for Condition of Certification **GEN-6** should be changed to read as follows:

Verification: At least 15 days (or project owner and CBO approved alternative timeframe) prior to the start of an activity requiring special inspection, the project owner shall submit to the CBO for review and approval, with a copy to the CPM, the name(s) and qualifications of the certified weld inspector(s), or other certified special inspector(s) assigned to the project to perform one or more of the duties set forth above. The project owner shall also submit to the CPM a copy of the CBO's approval of the qualifications of all special inspectors in the next Monthly Compliance Report.

If the special inspector is subsequently reassigned or replaced, the project owner has five days in which to submit the name and qualifications of the newly assigned special inspector to the CBO for approval. The project owner shall notify the CPM of the CBO's approval of the newly assigned inspector within five days of the approval.

RESPONSE TO AGENCY AND PUBLIC COMMENTS

SJFD-5 On page 5.1-17, **STRUC-4** states that "Tanks and vessels containing quantities of toxic or hazardous materials exceeding amounts specified in Chapter 3, Table 3-E of the 1998 CBC shall, at a minimum, be designed to comply with Occupancy Category 2 of the 1998 CBC." The occupancy groups defined by the CBC are A, B, C, E, F, H, I, M, R, S, and U. Please define Category 2.

Response**: Page 5.1-17**, the condition of certification **STRUC-4** should state the following:

STRUC-4 Tanks and vessels containing quantities of toxic or hazardous materials exceeding amounts specified in Chapter 3, Table 3-E of the 1998 CBC shall, at a minimum, be designed to comply with the requirements of this Chapter.

Verification: At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of installation of the tanks or vessels containing the above specified quantities of toxic or hazardous materials, the project owner shall submit to the CBO for design review and approval final design plans, specifications, and calculations, including a copy of the signed and stamped engineer's certification.

The project owner shall send copies of the CBO approvals of plan checks to the CPM in the following Monthly Compliance Report. The project owner shall also transmit a copy of the CBO's inspection approvals to the CPM in the Monthly Compliance Report following completion of any inspection.

ALTERNATIVES

Supplemental Testimony of Robert Worl

SJ-51 Page 5.6-4, second to last bullet should read “Edenvale” not “Avendale” Redevelopment Area.

Response: Page 5.6-4, the second to last bulleted item should read as follows:

- One site was located in South San Jose within the New Edenvale Redevelopment area.

SJ-52 The Map on 5.6-5 is missing.

Response: The Map, Alternatives Figure 1, was inadvertently left out of copies of the SA. It is also attached to this addendum.

SJ-53 Discussion of the Edenvale alternative should discuss any expected increase or decrease in Biotics Impacts (related to Burrowing Owls, Serpentine Soils), possible General Plan conflicts regarding height restrictions, and if this alternatives would accomplish any or all of the projects objectives / goals. See **ALTERNATIVES**

Response: The New Edenvale Redevelopment area is currently zoned IP (Industrial Park) in the San Jose General Plan. As such, a rezone with variances for height and use (power plant) would probably be required, similar to those enacted or proposed by the City of San Jose for the current project site. Much of the area is recent agricultural land with the potential for providing borrowing owl habitat. Other biological resources including serpentine soils may be present in proximity to the area. No specific surveys were encountered. Property ownership within the area may make finding appropriate adjacent parcels time consuming. (Conversations with Rob Eastwood, City of San Jose, 2002). This combination of issues could have the effect of delaying the project well beyond the fall of 2002 online date, and would also produce difficulties in siting the related U.S. DataPort facility which plans to rely on LECEF as a reliable critical energy facility at construction.

In addition, Pacific Gas and Electric has been ordered to begin constructing the proposed Los Esteros Substation as part of the North San Jose Transmission Reinforcement Project. This project is to provide reliability and better distribution to the North San Jose area, enhancing access and reliability for the growing electrical needs of the area. The LECEF would not be useful in that regard from a New Edenvale site.

MIL-39 Alternatives Figure 1 (“Map of Proposed Project and Alternative Sites”) was not included in the SA.

Response: See **SJ-52** above, and the map attached to this addendum.

MIL-40 Is it proper to include as one of the project objectives “to be on line by summer of 2002”? By including this objective, only the LECEF project will meet the objective. What is the purpose of having the project online by summer of

2002? Is it simply to meet the requirements of the four-month process? That is circular logic and is inconsistent with CEQA.

Response: The applicant's stated on-line objective serves the purpose of meeting a contractual obligation to provide electricity per an existing Department of Water Resources contract.

MIL-41 *Edenvale Redevelopment Area.* It would appear that the Edenvale Redevelopment Area is a viable alternative location for this project. Milpitas believes that this location may be an environmentally better location. However, it is apparently rejected because the applicant could not meet the objective of having the project online by summer of 2002. In the disadvantages section of the Edenvale Redevelopment option, the SA states that the alternative may impact potential business developments in the area; yet, the LECEF project in its current location may impact planned business developments as well.

Response: See **SJ-53** above.

MIL-42 *No Project.* In reviewing the project's objectives and the no-project alternative, Milpitas concluded that the SA should include an alternative that permits the LECEF project going forward only if the U.S. DataPort project goes forward. Indeed, the SA describes providing reliable power to the DataPort as the critical project objective. However, the no-project alternative assumes that, if the LECEF project did not go forward, the U.S. DataPort project would go forward with the diesel generators that were originally proposed and rejected by San Jose. That assumption is inconsistent with the U.S. DataPort's conditions of approval.

Response: The referenced conditions of approval in the U.S. DataPort (USDP) EIR contain a caveat for allowing diesel generation should the applicant (USDP) be unsuccessful in securing the appropriate alternative modern power plant permits. (San Jose City Council Resolution 70259, April 3, 2001). Obviously, if USDP is unable to use a "right-sized" facility licensed by the Energy Commision, its alternative is to go back to the original proposal—a smaller gas-fired facility supplemented by roughly 90-100 megawatts of diesel backup generation.

REFERENCES

PAGE 5.6-12 Add the following references:

Eastwood, Rob. 2002. Planner II, City of San Jose, Planning, Building, and Code Enforcement Department. Personal Communication with Robert Worl, CEC, regarding recent zoning changes and potentinal environmental issues in the New Edenvale Redevelopment area. January 30, 2002.

City of San Jose. 2001. San Jose City Council Resolution 70259, April 3, 2001).

GENERAL CONDITIONS
INCLUDING
COMPLIANCE MONITORING AND CLOSURE PLAN

Supplemental Testimony of Christian Huntley

Page 6-1: The title page is modified (above) to show substitution of Christian Huntley as the Compliance Project Manager submitting testimony.

Page 6-11 is modified with the following, which precedes the heading, **FACILITY CLOSURE**:

CONSTRUCTION MILESTONES

The following is the procedure for establishing and enforcing milestones, which include milestone dates for pre-construction and construction phases of the project.

Milestones, and method of verification must be established and agreed upon by the project owner and the CPM no later than 30 days after project approval, the date of docketing. If this deadline is not met, the CPM will establish the milestones.

I. ESTABLISH PRE-CONSTRUCTION MILESTONES TO ENABLE START OF CONSTRUCTION WITHIN ONE YEAR OF CERTIFICATION

1. Obtain site control.
2. Obtain financing.
3. Mobilize site.
4. Begin rough grading for permanent structures (start of construction).

II. ESTABLISH CONSTRUCTION MILESTONES FROM DATE OF START OF CONSTRUCTION

1. Begin pouring major foundation concrete.
2. Begin installation of major equipment.
3. Complete installation of major equipment.
4. Begin gas pipeline construction.
5. Complete gas pipeline interconnection.
6. Begin T-line construction.

7. Complete T-line interconnection.

8. Begin commercial operation.

The CPM will negotiate the above-cited pre-construction and construction milestones with the project owner based on an expected schedule of construction. The CPM may agree to modify the final milestones from those listed above at any time prior to or during construction if the project owner demonstrates good-cause for not meeting the originally-established milestones. Otherwise, failure to meet milestone dates without a finding of good cause is considered cause for possible forfeiture of certification or other penalties.

III. A FINDING THAT THERE IS GOOD CAUSE FOR FAILURE TO MEET MILESTONES WILL BE MADE IF ANY OF THE FOLLOWING CRITERIA ARE MET:

1. The change in any milestone does not change the established commercial operation date milestone.

2. The milestone is changed due to circumstances beyond the project owner's control.

3. The milestone will be missed, but the project owner demonstrates a good-faith effort to meet the project milestone.

4. The milestone will be missed due to unforeseen natural disasters or acts of God which prevent timely completion of the milestones.

If a milestone date cannot be met, the CPM will make a determination whether the project owner has demonstrated good cause for failure to meet the milestone. If the determination is that good cause exists, the CPM will negotiate revised milestones.

If the project owner fails to meet one or more of the established milestones, and the CPM determines that good cause does not exist, the CPM will make a recommendation to the Executive Director. Upon receiving such recommendation, the Executive Director will take one of the following actions.

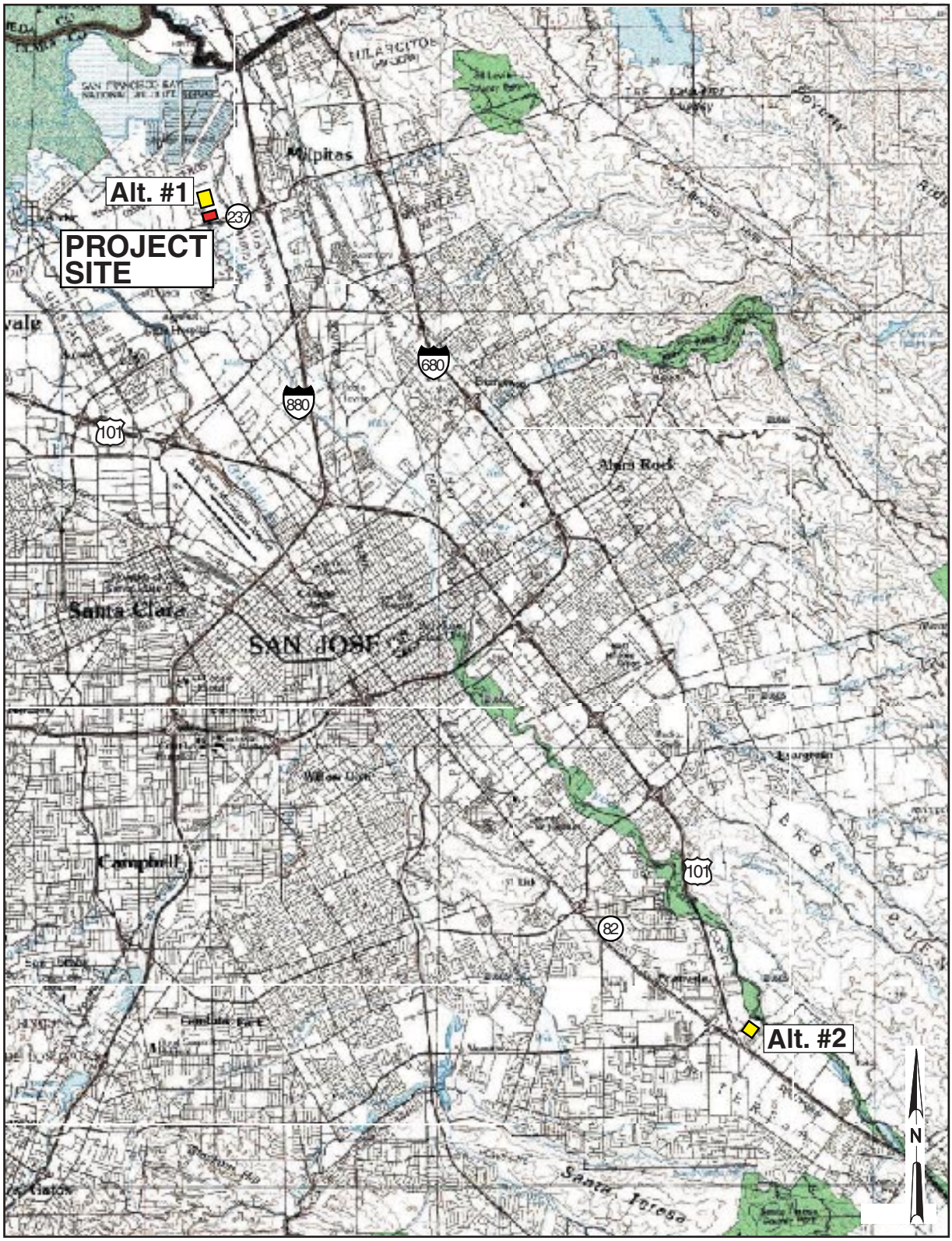
1. Conclude that good cause exists and direct that revised milestones be established; or

2. Issue a reprimand, impose a fine, or take other appropriate remedial action and direct that revised milestones be established; or

3. Recommend, after consulting with the Siting Committee, that the Commission issue a finding that the project owner has forfeited the project's certification.

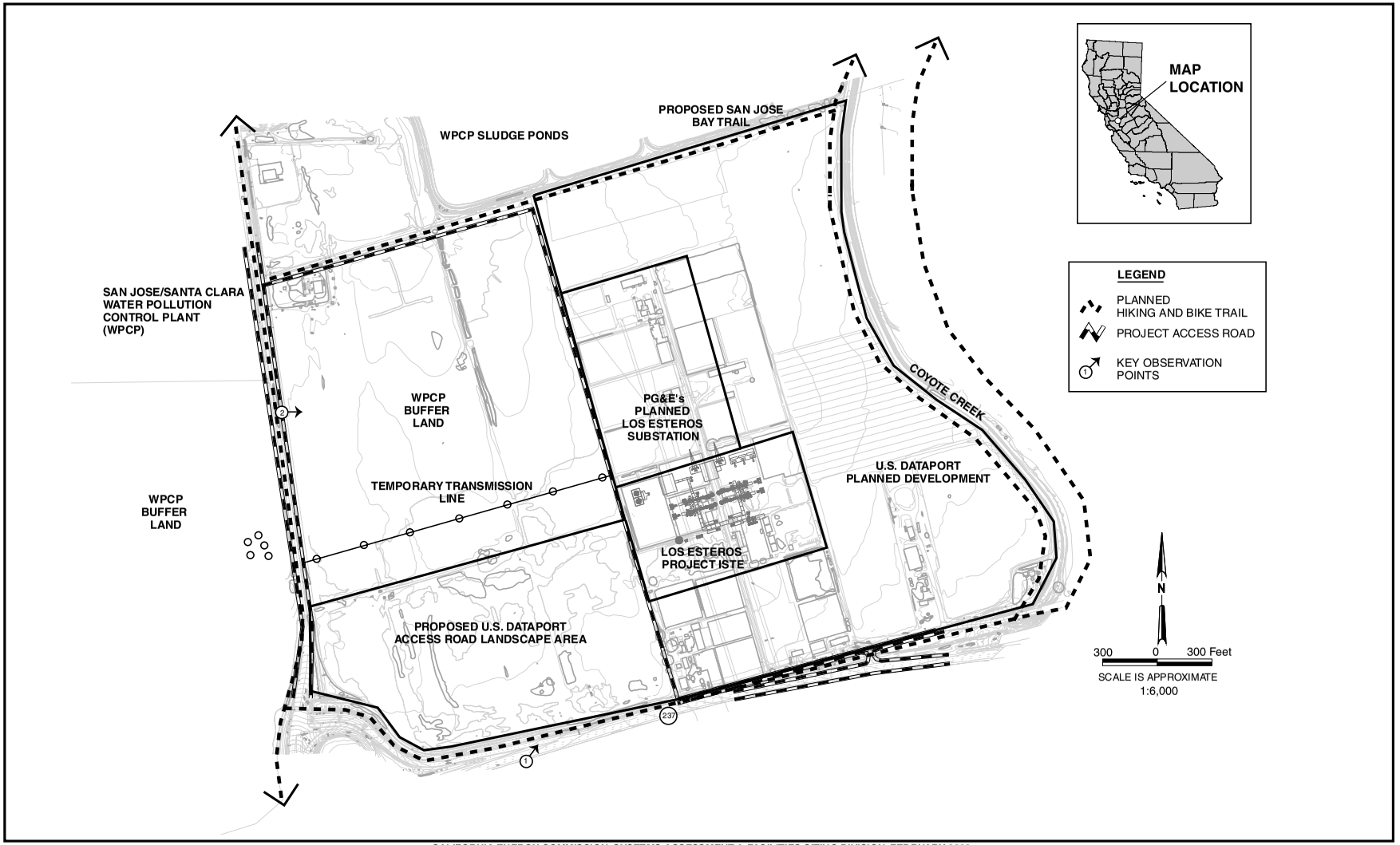
The project owner has the right to appeal a finding of no good cause, or any recommended remedial action to the full Commission.

ALTERNATIVE SITES - Figure 1
Los Esteros Critical Energy Center - Alternative Sites 1 & 2



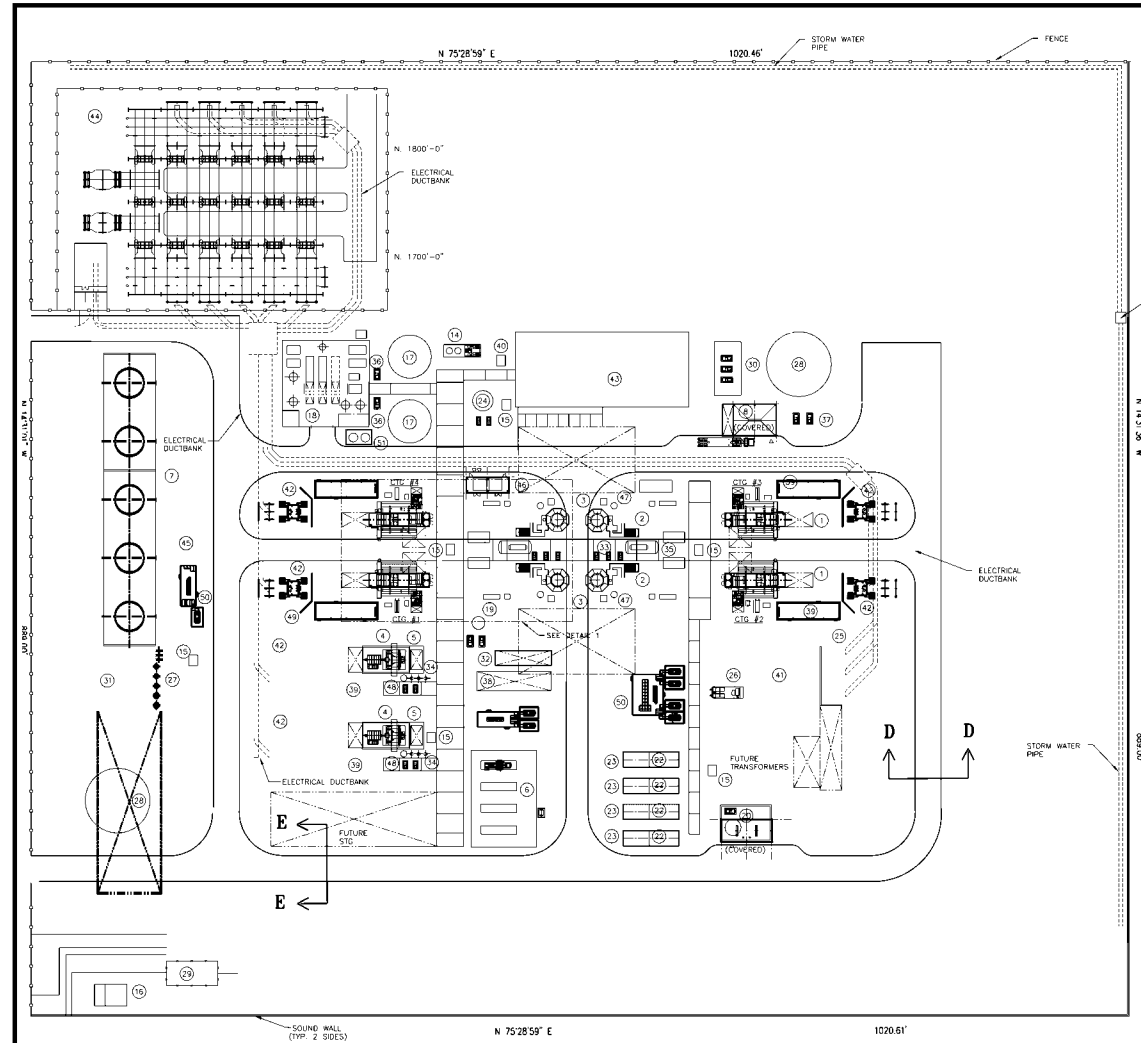
CALIFORNIA ENERGY COMMISSION, SYSTEMS ASSESSMENT & FACILITIES SITING DIVISION, DECEMBER 2001
SOURCE: USGS

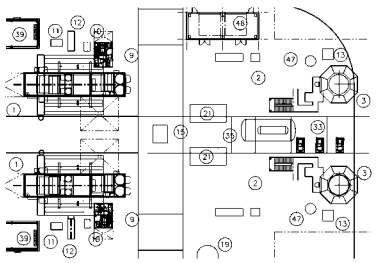
PROJECT DESCRIPTION ADDENDUM - FIGURE 2
Los Esteros Critical Energy Facility - Local Area Setting
LECEF, USDP and Los Esteros Substation



CALIFORNIA ENERGY COMMISSION, SYSTEMS ASSESSMENT & FACILITIES SITING DIVISION, FEBRUARY 2002
SOURCE: Calpine TDP September, 2001

PROJECT DESCRIPTION
FEBRUARY 2002





DETAIL 1

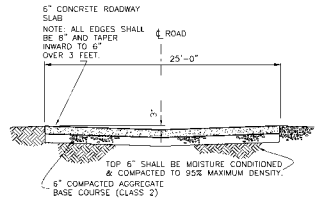
COMBUSTION TURBINE AND HRSG w/SCR SYSTEM
EQUIPMENT LAYOUT
SCALE: NONE

ITEM	DESCRIPTION
1	COMBUSTION TURBINE GENERATOR
2	HRSG WITH SCR SYSTEM
3	STACK
4	STEAM TURBINE GENERATOR
5	STEAM TURBINE CONDENSER
6	FUEL GAS COMPRESSOR
7	COOLING TOWER
8	LUBE OIL STORAGE
9	AUXILIARY SKID
10	SPRINT SKID
11	CTG FIRE PROTECTION CO_2 SKID
12	WATER INJECTION SKID
13	CEMS BUILDING
14	AIR COMPRESSOR/AIR DRYER SKID
15	OIL WATER SEPARATORS & WASH WATER DRAIN TANK
16	PROCESS SUMP
17	DEMINERALIZED WATER STORAGE TANKS
18	WATER TREATMENT BUILDING
19	CONDENSATE STORAGE TANK
20	AQUEOUS AMMONIA STORAGE TANK & PUMP
21	AMMONIA FEED SKID
22	CTG INLET AIR CHILLER SYSTEM
23	CTG CHILLED WATER PUMPS
24	POTABLE WATER TANK AND PUMPS
25	115KV – 4.16KV AUXILIARY TRANSFORMER
26	BLACK START GENERATOR
27	CIRCULATING WATER PUMPS
28	RAW WATER STORAGE TANK
29	FUEL GAS METERING (BY PG&E)
30	FIREWATER MOTOR DRIVEN, ENGINE DRIVEN & JOCKEY PUMPS
31	AUXILIARY COOLING WATER PUMPS
32	CONDENSATE TRANSFER PUMPS
33	BOILER FEEDWATER PUMPS
34	HOTWELL PUMPS
35	DEARATOR WITH DA STORAGE TANK
36	DEMINERALIZED WATER TRANSFER PUMPS
37	RAW WATER TRANSFER PUMPS
38	EQUIPMENT COOLING WATER HEAT EXCHANGERS & PUMPS
39	TURBINE ELECTRICAL SUPPORT ENCLOSURE
40	SANITARY WASTE LIFT STATION
41	4.16KV SWITCHGEAR
42	GENERATOR STEP-UP TRANSFORMER
43	SERVICE BUILDING – (FLOOR AREA=15,486 S.F.)
44	115 KV SWITCHYARD
45	COOLING TOWER CHEMICAL FEED SYSTEM
46	CYCLE CHEMICAL FEED SYSTEM
47	BLOWDOWN TANK
48	STEAM TURBINE DRAIN TANK WITH PUMPS
49	NITROGEN STORAGE
50	4.16KV MCC
51	WATER TREATMENT CHEMICAL STORAGE

PERCENT COVERAGE:

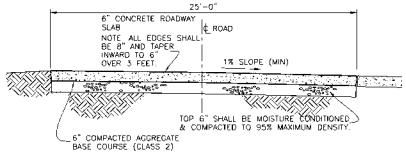
DESCRIPTION	AREA (acres)	COVERAGE (%)
IMPERVIOUS AREA: BUILDINGS, EQUIPMENTS, STREETS, PARKING LOT AND CONCRETE PADS	11.5±	55%
PERVIOUS AREA: LANDSCAPING	1.8±	9%
OPEN AREA	7.5±	36%
TOTAL LOT AREA	20.8±	100%

NUMBER OF PARKING SPACES : 12



SECTION D-D

NOT TO SCALE



SECTION E-E

NOT TO SCALE

Harris Group Inc.
DENVER, COLORADO

PD PERMIT

DATE: OCTOBER 2001					APPROVAL		PREPARED BY, OR UNDER THE DIRECTION OF:
SCALE: 1"=50'							
DESIGNED:							
DRAWN:							BY:
CHECKED:							R.C.E. No.
PROJ. ENGR.:	NO.	BY	DATE	REVISIONS	BY	DATE	DATE:
PROJ. MGR.:							

Planning
Surveying & Mapping
Land Development Engineering
Municipal Engineering
Construction Staking
Construction Management

MILANI & Associates

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Pleasant Hill, CA 94523
Phone: (925) 941-1490
Fax: (925)941-1496

P.D. ZONING FILE NO. PDCSH 01-09-088 P.D. PERMIT FILE NO. PDC_____

PLANNED DEVELOPMENT PERMIT

DETAILED SITEPLAN

CITY OF SAN JOSE SANTA CLARA COUNTY CALIFORNIA

DWG PDPERMIT/PDSBWG

SHEET 3B OF SHEETS

JOB NO. 210043-10

XREF:
SNAP SHOT:
PLOT DATE: